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HISTORY of WAR

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Great Battles

CAMBRAI
INSIDE THE WORLD'S
FIRST TANK ASSAULT



PASIR PANJANG



WATERLOO

BATTLES AGAINST THE ODDS FROM THE ANCIENT WORLD TO WWII



ARNHEM



RORKE'S DRIFT



WWI FIGHTER ACE



STAMFORD BRIDGE

95th RIFLES

THE ELITE SHARPSHOOTERS
THAT CRUSHED NAPOLEON



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U-BOATS

SECRETS OF HITLER'S
UNDERWATER MENACE

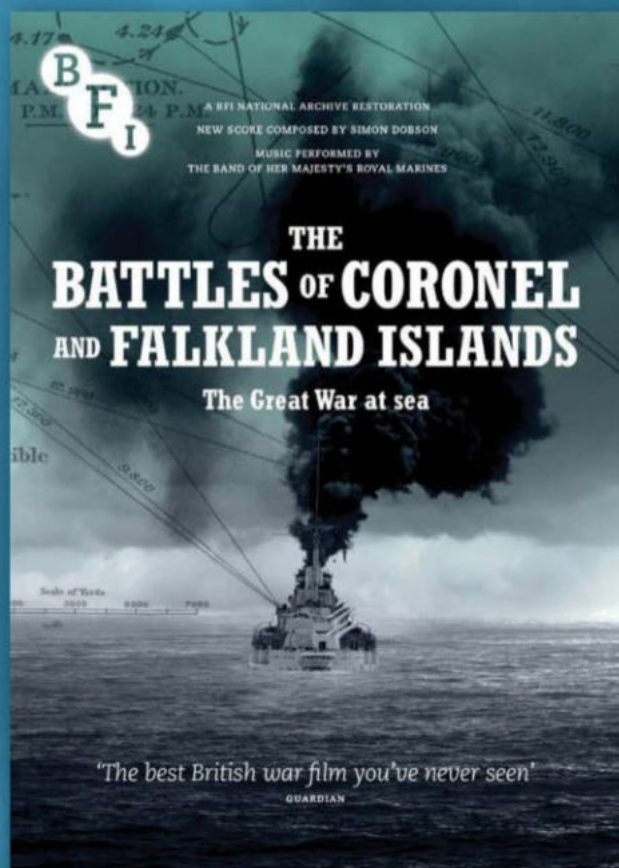


**SPAIN
AT WAR**
COMMUNISTS
VS FASCISTS



ALAMO

FILMS OF REMEMBRANCE



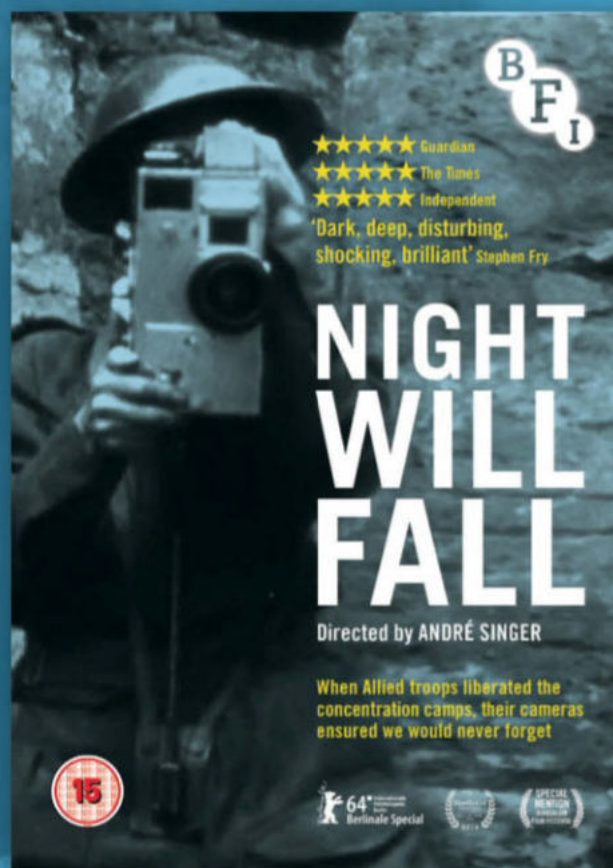
THE BATTLES OF CORONEL AND FALKLANDS ISLANDS

Newly restored by the BFI National Archive, this stunning 1927 silent film reconstructs two of the key naval battles of World War One.

With a new score performed by the Band of Her Majesty's Royal Marines.

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The Battles of Coronel and Falkland Islands score supported by PRS for Music Foundation.



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Using original archive footage and eyewitness testimonies, this acclaimed documentary tells the extraordinary story of the filming of the liberation of the Nazi concentration camps by the Allied forces, and how the footage was shelved for 70 years.

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bfi.org.uk

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Welcome

“War makes heroes or villains of us all”

The intensity of conflict tests the character of all those it blows across and it's hard not to read of these incredible experiences and wonder – or worry – about history might treat us were we in the same situation.

From the tragic (and of course sometimes triumphant) 25 Last Stands (page 40) and the daring of the 95th Rifles (page 26) to the horrifying brutality of World War I chemical warfare (page 76), the human story shines through the often cold business of tactics and technology, offering heroes, villains, and shades in between.

All deserve to be remembered and their experiences learnt from,

because you never know how you might fare amid the rattle of gunfire and the distant boom of heavy artillery...



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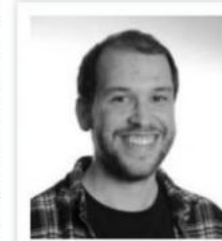
NICK SOLDINGER

This issue Nick has turned his expert eye to the horrors of gas warfare in WWI, investigating how it was developed, deployed and some of the shocking effects it had on frontline troops (page 76).



TOM FORDY

Tom is a regular contributor to *The Telegraph* and an avid military history enthusiast. This issue he takes a look at some of the most infamous and unbelievable last stands in our cover feature (page 40).



JONATHAN HATFULL

The Battle of Cambrai was a landmark event in both the history of WWI and warfare in general. This issue meticulous researcher, writer and history buff Jonathan takes you onto the frontline in his Greatest Battles feature (page 58).

www.historyanswers.co.uk



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25 GREATEST LAST STANDS

40 From the lone Viking of Stamford Bridge, to the Battle of the Alamo

Frontline

12 Submarines

From origins in the Revolutionary War, to the nuclear behemoths of the 20th Century

14 Submarines around the globe

A world tour of history's submersible innovations and underwater battlefields

16 Inside a Type VII U-boat

Aboard the most famous and deadliest breed of hidden hunter that dominated the Atlantic

18 Life under the waves

Radioman Tim Moore discusses his time aboard US submarines during the Cold War

20 Anti-submarine weapons

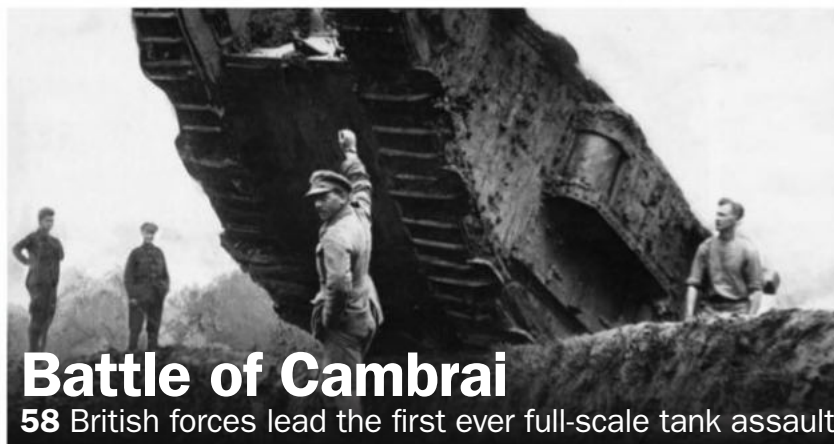
How new technology throughout history has attempted to hunt and destroy

22 Capturing U-505

The story of how the US Navy tracked and caught this elusive Nazi submarine

24 Head-to-head

The Soviet K-43 submarine is pitted against the USS Casimir Pulaski



Battle of Cambrai

58 British forces lead the first ever full-scale tank assault



Westland Wasp

86 Sit in the pilot's seat of this submarine hunter

Subscribe

52 Never miss an issue, get your History of War before it's in the shops and save a bundle while you're at it!

06 WAR IN FOCUS

Stunning imagery from throughout history, showing war in all its jaw-dropping detail

26 95th Rifles: Britain's elite

The training, weapons and tactics of Britain's elite sharpshooters

38 ICON OF WAR Cavalry sabre

The beautiful but deadly design of these Napoleonic-era weapons of war

40 25 greatest last stands

From the defiant to the desperate: a look at some of most die-hard final stands ever

54 TRIGGER POINT Spanish Civil War

The massacres and revolts that led to this ultimate Communist vs Fascist showdown

58 GREAT BATTLES Cambrai

General Julian Byng leads the British Third Army in one of WWI's most-daring assaults

66 BRIEFING Somali Civil War

What led this African nation to be torn apart by a conflict that is still raging today

72 HEROES OF THE MEDAL OF HONOR Benjamin F. Wilson

How one man took on the enemy armed with nothing but a shovel, and survived

76 Gas! Gas!

The poisonous fog of war that terrorised the battlefields and trenches of Europe

86 OPERATOR'S HANDBOOK Westland Wasp

The flexible helicopter that hunted Argentinean submarines in the Falklands

92 Book reviews

A roundup of the latest military titles waiting for you on the shelves

98 WAR IN NUMBERS Type VII U-boat

The devastation wrought by WWII's most lethal underwater killer



95TH RIFLES

26 How Britain's original sharpshooters ruled the battlefields of Napoleonic Europe



GAS! GAS!

76 How these silent superweapons changed the battlefields of WWI



Civil war

54 How Spain slipped into a self-destructive internal conflict



US ARMY HERO

72 Winning the Medal of Honor



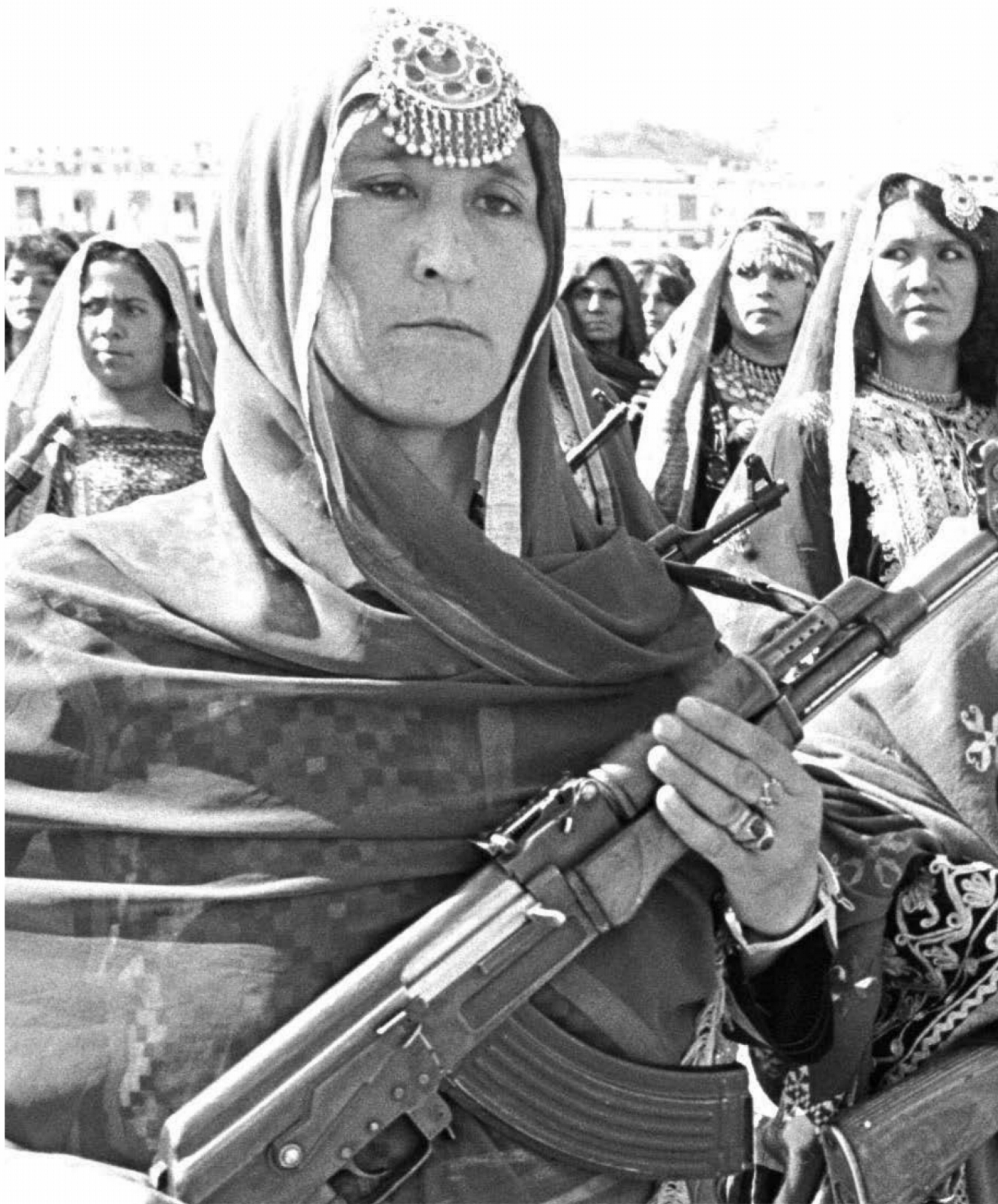


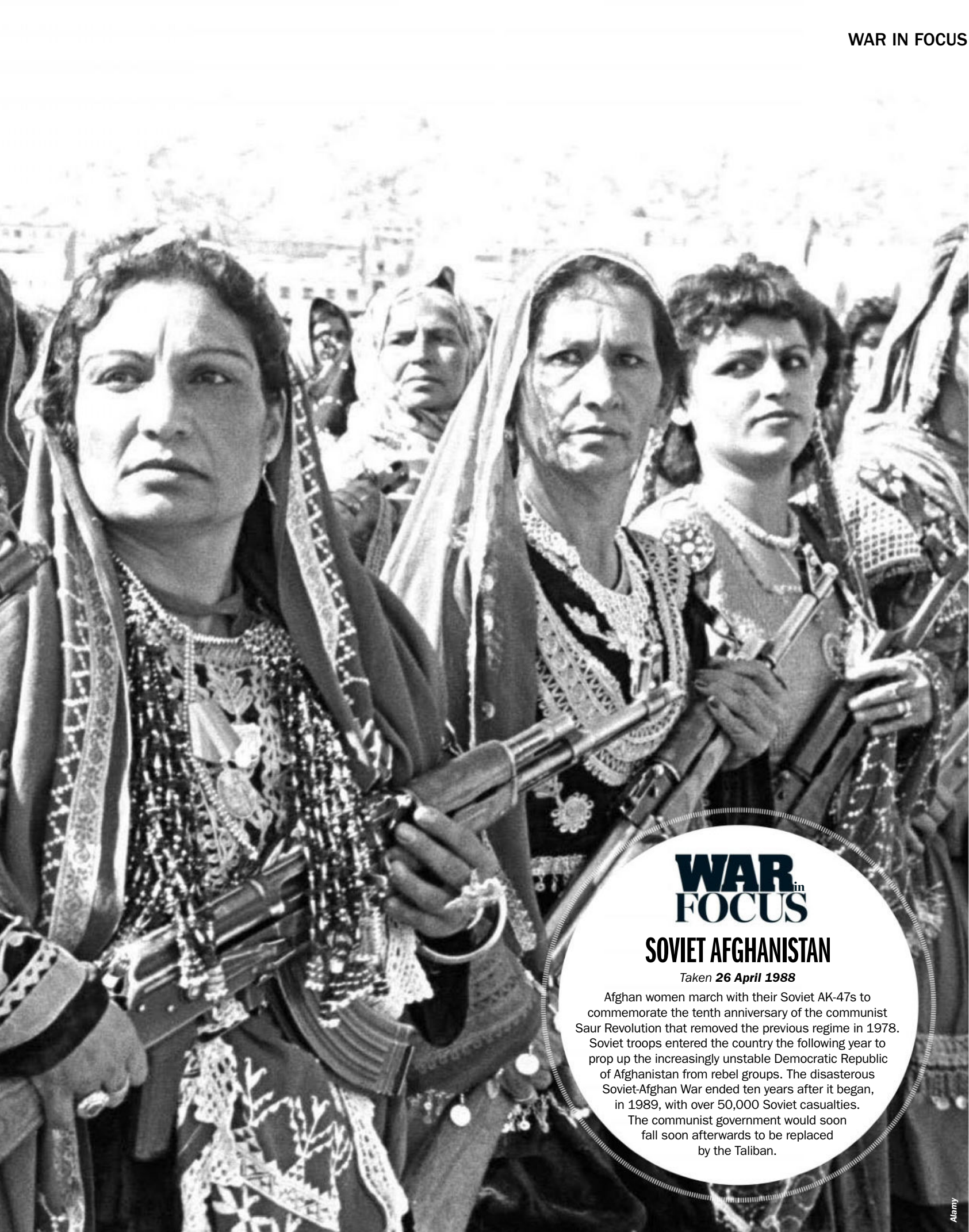
WAR_{in} **FOCUS**

STALIN MUST BURN

Taken 1941

A Wehrmacht Flammenwerfer flamethrower operator fires a murderous jet of flaming oil (Flammöl 19, which is petrol mixed with tar to give it a greater weight and range) in the early stages of Operation Barbarossa. The heavier Flammenwerfer 35 flamethrower was phased out from 1941 with the lighter Flammenwerfer 41 taking its place. Along with a superior maximum range of up to 32 metres, the 41's nozzle was designed to make the flamethrower look like a rifle and present a less-tempting target for snipers.





WARⁱⁿ FOCUS

SOVIET AFGHANISTAN

Taken 26 April 1988

Afghan women march with their Soviet AK-47s to commemorate the tenth anniversary of the communist Saur Revolution that removed the previous regime in 1978. Soviet troops entered the country the following year to prop up the increasingly unstable Democratic Republic of Afghanistan from rebel groups. The disastrous Soviet-Afghan War ended ten years after it began, in 1989, with over 50,000 Soviet casualties.

The communist government would soon fall soon afterwards to be replaced by the Taliban.



**WAR_{in}
FOCUS****SILENCE BEFORE THE STORM**

Taken **October 2014**

Cpl Linnell and Pte Ballan, from FSG (Fire Support Group) platoon, Support Company (Y-Coy), 1st Battalion the Princess of Wales's Royal Regiment, man defensive positions in Kenya as part of Exercise Askari Thunder VI. Taken by Sgt Jonathan Van Zyl, 'Silence Before the Storm' is the runner up in 2014's Army Photographic Competition. Exercises like this are valuable to operations in the similar landscapes across the Middle East and British Army Training Unit Kenya is permanently based in the country.



Frontline

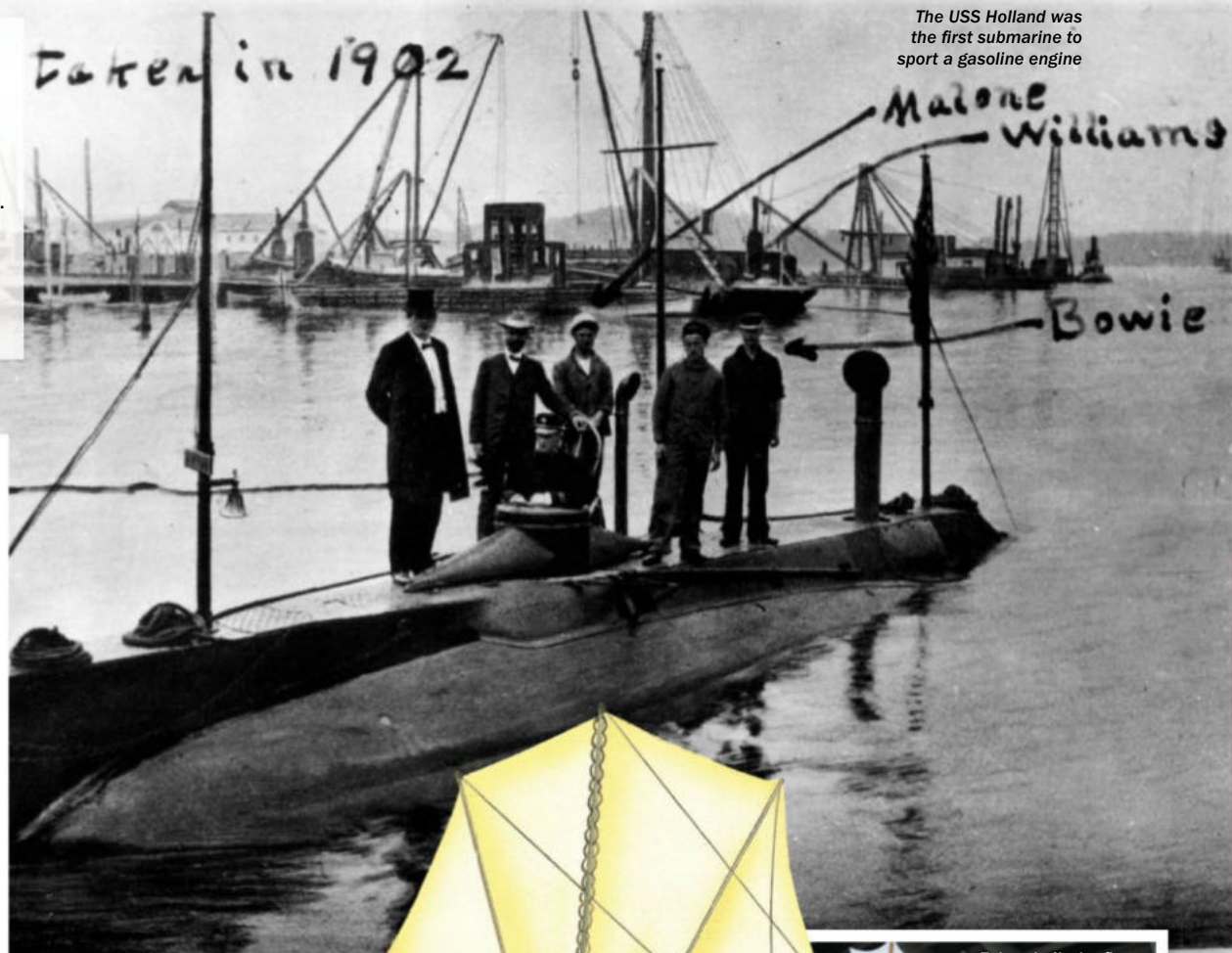
SUBMARINES

Some of the milestones in the history of these submerged military marvels

USS HOLLAND 1900

Country: **USA**

Despite early prototypes being dismissed as not fit for purpose, the US Navy eventually bought John Holland's machine in 1900. It was the first to sport a fully functioning gasoline engine and an on-board generator that powered the submersible while below the surface.



The USS Holland was the first submarine to sport a gasoline engine

TURTLE 1776

Country: **USA**

The Turtle was originally conceived by David Bushnell, a Connecticut-based inventor, before the start of the Revolutionary War (1775-1783). With air pipes to sustain the life of its driver, the Turtle also featured a hand-cranked oar that propelled the submersible and tanks that took on water to submerge the vehicle. These tanks would be emptied in order for the Turtle to re-surface.

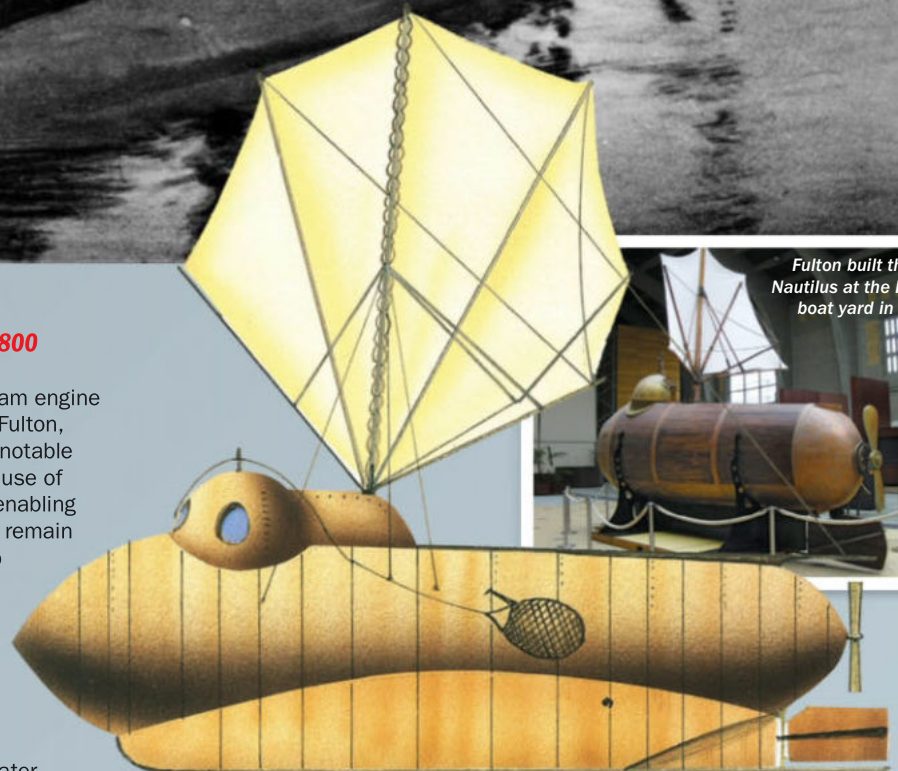
David Bushnell's Turtle submarine was designed for single occupancy



NAUTILUS 1800

Country: **France**

Developed by steam engine innovator Robert Fulton, the Nautilus was notable for its pioneering use of compressed air, enabling crew members to remain submerged for up to four hours. It also possessed a propulsion system and a sophisticated mechanism for manoeuvring vertically under water.



Fulton built the first Nautilus at the Perrier boat yard in Rouen

Six Trafalgar-class subs were in service with the Royal Navy



TRAFALGAR-CLASS 1981

Country: **United Kingdom**

The line of sturdy Trafalgar-class British subs has been present in the Royal Navy's fleet since the early 1980s. Initially used as attack subs equipped with torpedoes and Tomahawk cruise missiles with a range of 1,000 miles, these machines now tend to be used to carry out reconnaissance and covert surveillance.

YANKEE-CLASS BMS 1968

Country: **Soviet Union**

This fearsome ballistic missile submarine (BMS) was also equipped with sea mines and torpedoes. It occupied various oceans around the world from the 1960s onwards, operating en masse during the Cold War. It was the first Soviet submarine class to possess thermonuclear capabilities, representing a true threat to the West.



Yankee is just a nickname for the BMS class of Soviet sub

5 Facts about SUBMARINES

LAND OF THE FREE

Despite the tech being ahead of its time, both the Union and the Confederate States built and utilised primitive forms of submarines during the American Civil War of the 1860s.

AROUND THE WORLD

In 1960 the USS Triton became the first submersible in history to circumnavigate the Earth while submerged.

FOREVER BLOWING BUBBLES

The UK's new Astute-class subs have an on-board diffuser that emits carbon dioxide. This limits the amount of air bubbles that appear on the surface, to aid in concealment of the vessels.

PEACE TIME

The Royal Navy hasn't fired an underwater torpedo in live conflict since the sinking of the General Belgrano by HMS Conqueror during the Falklands War.

INTO THE ABYSS

The first submarine to reach the Challenger Deep – the deepest part of the ocean located in the Pacific (also known as the Marianas Trench) – was the bathyscaphe Trieste in 1960.

VIRGINIA-CLASS 1999

Country: **USA**

Probably the most-advanced submarine model operating today, Virginia-class boats are capable of hunting and destroying enemy submersibles and frigates, attacking ground targets with cruise missiles and performing underwater recon. At a length of 377 feet, the Virginia class is capable of achieving in excess of 25 knots.

Commissioned in 2004, it's estimated Virginia-class subs will last until 2070



TYPE-VII U-BOAT 1935

Country: **Germany**

The most infamous submarine ever built, the German U-Boat saw a significant amount of action during the Second World War and was responsible for the damaging or sinking of scores of Allied vessels. It played a key role in the Battle of the Atlantic, attempting to scupper Allied efforts to supply Britain with resources.



U-995 is the only surviving Type-VII class in the world

Getty

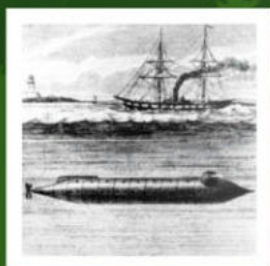
SUBMARINES OF THE WORLD

Discover the globe's best-known subs and their infamous encounters

1 RECON AT MIDWAY

PACIFIC OCEAN 4 JUNE 1942

US submarines prove to be key in ascertaining the strength and location of the Japanese fleet converging on Midway. In the ensuing battle, the US claims a decisive Pacific victory and the Imperial fleet is damaged beyond repair.



Alligator

Produced: 1862

Speciality: **Protecting wooden ships from Confederate ironclads**
Location: **Philadelphia, USA**

HL Hunley

Produced: 1863

Speciality: **Hunting Union warships**
Location: **Alabama, CSA**

2 UNDER THE POLE

THE NORTH POLE 3 AUGUST 1958

USS Nautilus, the world's first nuclear-powered submarine, makes history by reaching the North Pole and crossing it submerged, having set off from the United States some two months prior.



USS Nautilus enters New York Harbor in January 1956

Vetehinen-class

Produced: 1930

Speciality: **Coastal mine-laying**
Location: **Finland**

Whiskey-class

Produced: 1949

Speciality: **Coastal patrol**
Location: **Russia**

Kalev-class

Produced: 1935

Speciality: **Laying mines**
Location: **Estonia**

Rota-βclass

Produced: 1918

Speciality: **Torpedo warfare**
Location: **Denmark**

Daphné-class

Produced: 1958

Speciality: **Patrol and achieving greater depths**
Location: **Cherbourg, France**

Katsonis-class

Produced: 1925

Speciality: **Offensive manoeuvres**
Location: **Greece**

Type-209

Produced: 1971

Speciality: **Widely used deterrent**
Location: **Turkey**

Soviet K-class

Produced: 1936

Speciality: **Long-range search and destroy**
Location: **Leningrad, Soviet Union**

Tikuna

Produced: 1996

Speciality: **Attack submarine**
Location: **Brazil**

Scorpène-class

Produced: 1999

Speciality: **Offensive operations**
Location: **Chile**

3 THE FALKLANDS WAR

FALKLAND ISLANDS 30 APRIL 1982

The United Kingdom imposes a Total Exclusion Zone that surrounds the Falkland Islands, encompassing an area of 200 nautical miles. Any ships to enter this zone are fair game for British submarines.

4 KURSK DISASTER

NEAR MURMANSK, RUSSIA

12 AUGUST 2000

Oscar-class Russian sub Kursk is destroyed following a number of on-board torpedo explosions. The entirety of the boat's crew is killed, either by the initial explosions or from asphyxiation as fires break out in the aftermath.



The Kursk disaster claimed the lives of 118 Russian sailors, the full crew including five officers and two engineers



HMS Vanguard returns to HM Naval Base Clyde following CASD patrol in 2010

5 NUCLEAR TEST

FASLANE, SCOTLAND

26 MAY 1994

HMS Vanguard initiates the first test launch of a British nuclear Trident missile. Vanguard went on to embark on the first patrol that year in what is now the UK's ongoing strategy of continuous at-sea deterrence (CASD).

6 ATLANTIC BATTLE

JUST SOUTH-EAST OF BEAUFORT INLET, NORTH CAROLINA, USA

9 MAY 1942

German submarine U-352 is bested by patrol boat USCGC Icarus, under the command of the US Coast Guard. She is destroyed with depth charges, and her crew is taken prisoner by the US Navy.

7 UNDERWATER COLLISION

BAY OF BISCAY

4 FEBRUARY 2009

HMS Vanguard and French submarine Le Triomphant collide with each other in the Bay of Biscay, in what is a rather embarrassing incident for both the British and French Ministries of Defence. Both are nuclear subs, yet fortunately only sustain light damage.

8 LUSITANIA SUNK

SOUTHERN COAST OF IRELAND

7 MAY 1915

German U-boat U-20 fires a torpedo at HMS Lusitania, a passenger liner bound for Britain from New York. She sinks in only 18 minutes. A total of 1,195 passengers and crew are thought to have drowned.



Ghadir-class

Produced: 2006

Speciality: **Recon and direct attack**

Location: **Tehran, Iran**

Type AM

Produced: 1943

Speciality: **Command boats carrying sea-planes**

Location: **Japan**



Collins-class

Produced: 1990

Speciality: **Attack sub**

Location: **Australia**

RMS Lusitania was briefly the biggest ship of her day



Corbis

ANATOMY OF A TYPE VII U-BOAT

The most prolific military submersible ever built, German U-boats presented a major threat to Allied shipping in the Atlantic and elsewhere

CONNING TOWER

The conning tower was a common feature of submarines, but was and is found on many sea vessels. Although not actually the U-boat's command centre, despite its prominent placement, it was the area in which periscopes were operated in order to conduct reconnaissance and direct torpedo attacks.

ALL-SEEING EYE

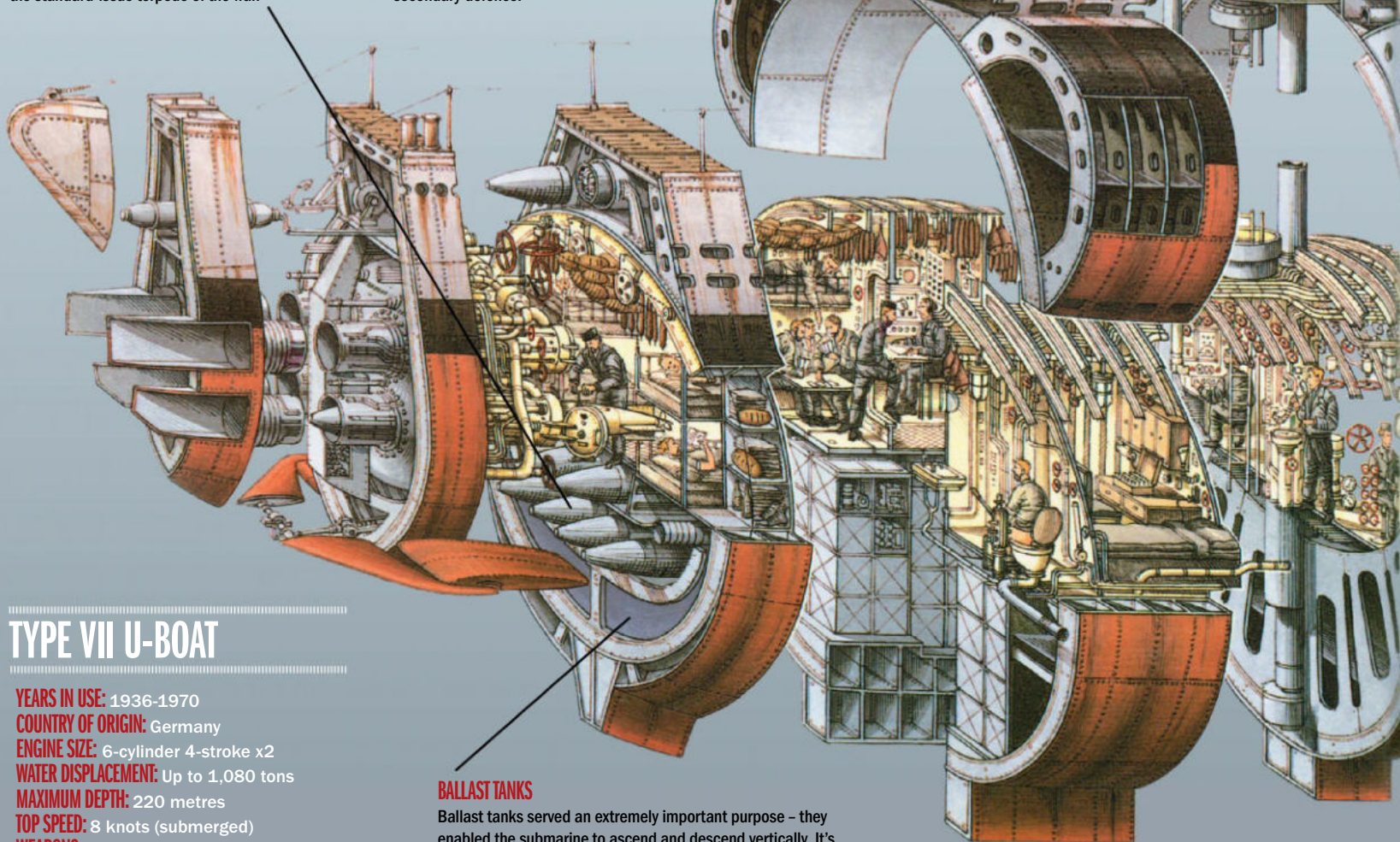
Another famous feature of both historical and contemporary submarine design, the periscope allows a submarine crew to observe goings-on both in the water and on the surface. By utilising mirrors, the periscope enabled U-boat crews to observe targets on the surface of the water without revealing the submarine's location.

TORPEDO ARSENAL

Key to any submarine in wartime, the Type VII carried a number of torpedoes on board, with its payload more than enough to cause considerable trouble for enemy submersibles and surface ships. The G7e torpedo was electric-propelled, and was the standard-issue torpedo of the war.

DECK GUN

The Type VII came complete with an 88mm cannon located just in front of the conning tower. Quite obviously this could only be used while the submarine was surfaced, but it presented an effective form of secondary defence.



TYPE VII U-BOAT

YEARS IN USE: 1936-1970

COUNTRY OF ORIGIN: Germany

ENGINE SIZE: 6-cylinder 4-stroke x2

WATER DISPLACEMENT: Up to 1,080 tons

MAXIMUM DEPTH: 220 metres

TOP SPEED: 8 knots (submerged)

WEAPONS: Torpedoes, mines and deck guns

CREW: Up to 60, including 4 officers

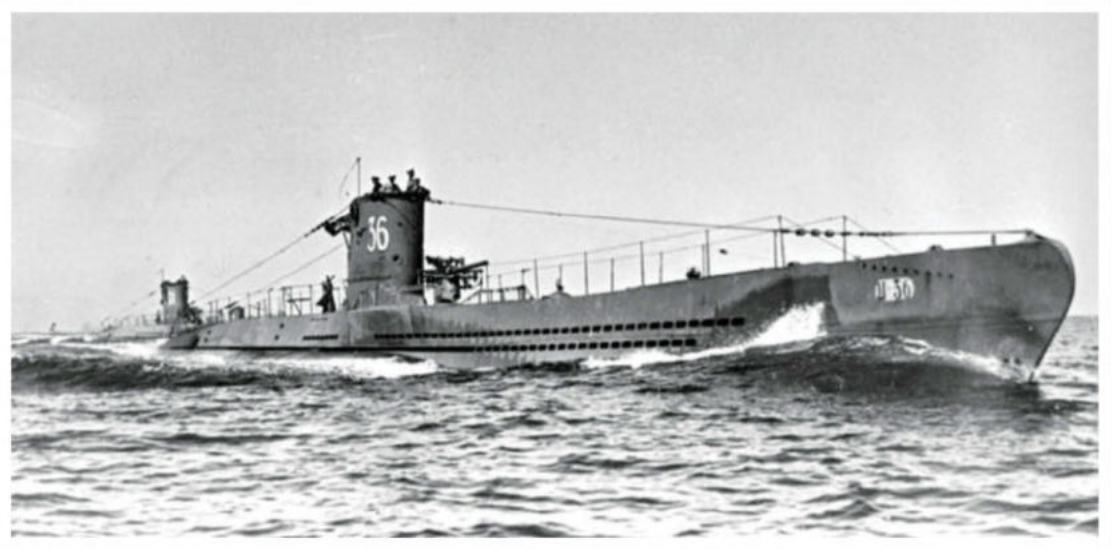
BALLAST TANKS

Ballast tanks served an extremely important purpose – they enabled the submarine to ascend and descend vertically. It's simple science, and an elegant solution – tanks inside the hull of the U-boat took on water to reduce buoyancy and enable the vessel to sink down out of sight.

The U-boat U-36 – a prime example of the German Type VIIA model submarine

ANTI-AIRCRAFT GUNS

If a Type VII were ever forced to return to the surface, it had some countermeasures on hand for any Allied aircraft that fancied taking a pop. This model would have been fitted with a 20mm flak cannon with a high rate of fire – more than enough to take down an Allied bird.



CREW QUARTERS

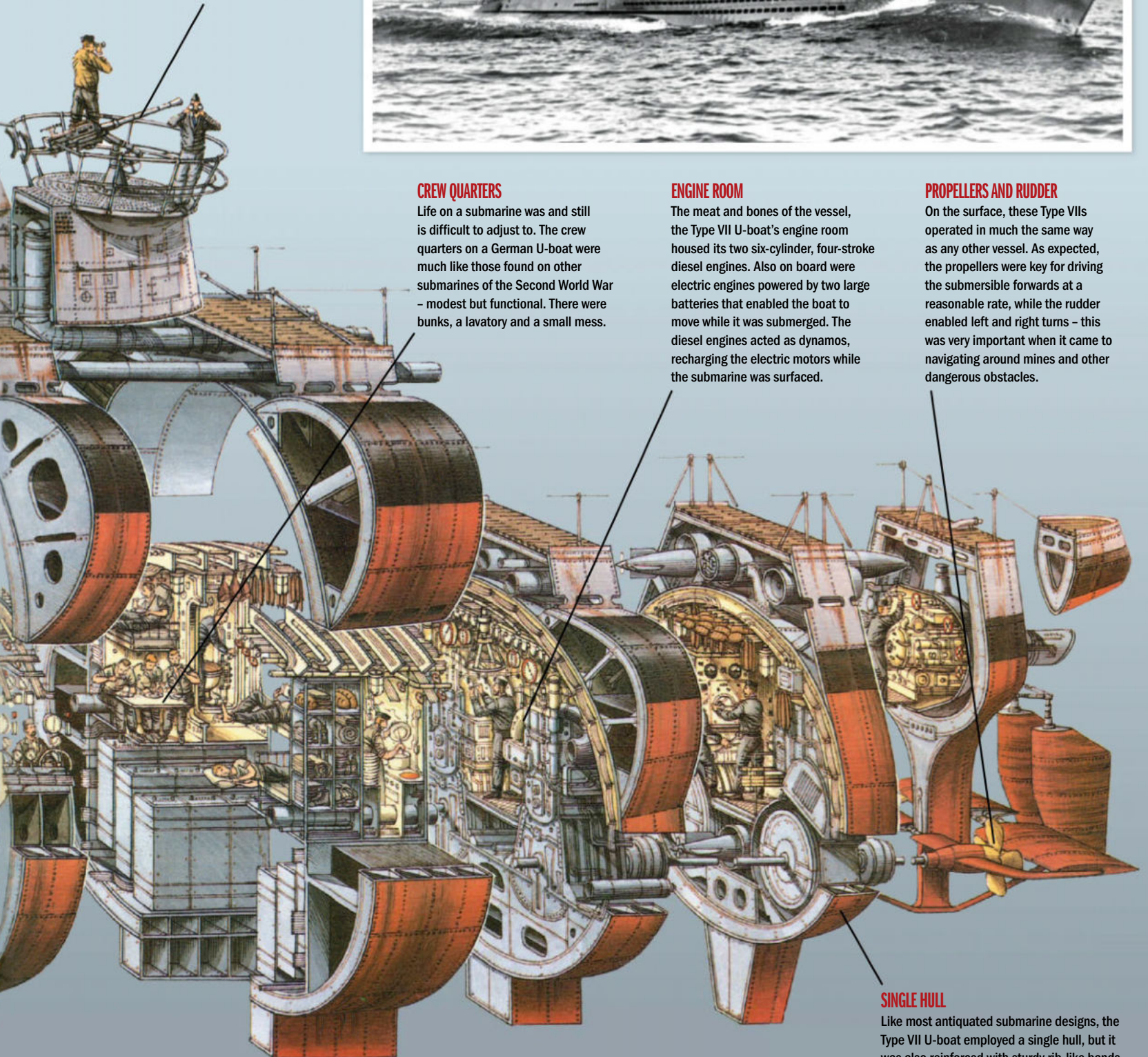
Life on a submarine was and still is difficult to adjust to. The crew quarters on a German U-boat were much like those found on other submarines of the Second World War – modest but functional. There were bunks, a lavatory and a small mess.

ENGINE ROOM

The meat and bones of the vessel, the Type VII U-boat's engine room housed its two six-cylinder, four-stroke diesel engines. Also on board were electric engines powered by two large batteries that enabled the boat to move while it was submerged. The diesel engines acted as dynamos, recharging the electric motors while the submarine was surfaced.

PROPELLERS AND RUDDER

On the surface, these Type VII's operated in much the same way as any other vessel. As expected, the propellers were key for driving the submersible forwards at a reasonable rate, while the rudder enabled left and right turns – this was very important when it came to navigating around mines and other dangerous obstacles.



SINGLE HULL

Like most antiquated submarine designs, the Type VII U-boat employed a single hull, but it was also reinforced with sturdy rib-like bands of steel to further fortify its outer shell. This was mostly to protect the craft against water pressure at significant depths.

DK Images

LIFE BENEATH THE WAVES

Radioman Tim Moore talks about life on a submarine from 1960 to 1966, at the height of the Cold War

WHICH SUBMARINE DID YOU SERVE ON?

I first served and qualified aboard the USS Seawolf SSN-575. The Seawolf was an experimental boat and was originally considered to be a "hunter-killer" class. My second assignment was aboard the USS Skipjack SSN-585, which was the very first "boomer", or ballistic missile submarine.

WHEN YOU JOINED THE US NAVY, DID YOU ALWAYS WANT TO SERVE ON A SUBMARINE?

My decision to volunteer for submarine service came after I went aboard the USS Razorback SS-394, a World War II Balao-class submarine. After my tour, having a meal and observing the lifestyle aboard a submarine, I immediately put in a "Special Request Chit" to apply for Submarine School.

WHAT WERE YOUR SUBMARINES' ROLES?

The primary missions of both the Seawolf and the Skipjack were to seek out and observe ship movements and activities of our naval adversaries. Other deployments included scientific experiments, war games and operations with other US and allied naval forces.

WHAT WAS THE CLOSEST YOU GOT TO ACTION?

The closest I ever came to action was when I volunteered for a special assignment, which lasted for about two weeks in the middle of the Cuban Missile Crisis in October 1962. During my tenure in

the submarine service, there were some close encounters with enemy vessels but we never got into any real trouble. However, from time to time we did encounter some "very interesting situations". I just simply don't recall all the details.

WHAT WAS YOUR ROLE ONBOARD?

My primary onboard responsibility was as a radioman performing incoming and outgoing radio communications. I was back-up for sonar and performed maintenance on communications equipment.

DESCRIBE THE FEELING OF BEING UNDER THE SEA FOR SUCH AN EXTENDED PERIOD.

Once submerged, night and day become non-existent. You entered into a repetitive routine that was controlled by a 24-hour clock. You knew when nighttime came because the Control Room was "rigged for red" during nighttime hours. This is a condition where white lights are turned off and red lights are illuminated. This is done so that your eyes are accustomed and acclimated to the dark in the event you need to do an emergency surface at night for some reason. My longest submerged deployment was a 63-day submerged patrol for a "Northern Run" in 1964.

CAN YOU DESCRIBE A DAY IN THE LIFE ONBOARD A SUBMARINE?

During most of my active duty time on board Seawolf and Skipjack, we had three-section duty where

"AMONG SUBMARINE SAILORS THERE IS A BROTHERHOOD WHICH I HAVE NOT PERSONALLY EXPERIENCED IN ANY OTHER WALK OF LIFE"

we stood four-hour watches, on for four hours and off for eight. During the eight hours off, you worked on qualifications learning a multitude of ship's systems, performed maintenance on equipment and general housekeeping duties. You slept as time and your onboard duties and responsibilities on the vessel permitted.

WHAT WERE YOUR LIVING QUARTERS AND DIET LIKE?

Living quarters were very tight. In some cases, crewmembers had to "hot bunk" meaning that two men shared one bunk. One slept while the other was on duty. The food on board a submarine was excellent. We had meals every four hours before or after watches and of course our famous Navy coffee 24-seven. We never went hungry but we did run out of fresh fruit, fresh vegetables and milk very soon after getting underway for a long deployment.

WAS EVERYONE ON BOARD YOUR SUBMARINES ABLE TO COPE WITH LIFE IN SUCH CONFINED CONDITIONS?

On long deployments there were some "testy" times among shipmates but that exists in any

kind of work environment. Among submarine sailors there is a brotherhood and camaraderie that exists which I have not personally experienced in any other walk of life.

WHAT DID YOU MISS MOST WHEN YOU WERE AT SEA?

I think the thing I missed the most was fresh air and sunshine. Occasionally we would get some "periscope liberty" and on rare occasions if we were in a warm climate we would be able to surface for "swim call" which was always refreshing.

WHAT ADVICE WOULD YOU GIVE TO ANYONE WANTING TO SERVE ON A SUBMARINE?

Be open-minded, maintain a good sense of humour, listen to your mentors and superiors, study diligently, keep your nose clean, follow orders and do your job to the absolute best of your ability. There may be times when you think some of your shipmates are "picking on you." It is important to remember that one day down the road, these very same shipmates may be depending on you to perform flawlessly in life-threatening situations and you just might be depending on them as well.

Tim Moore



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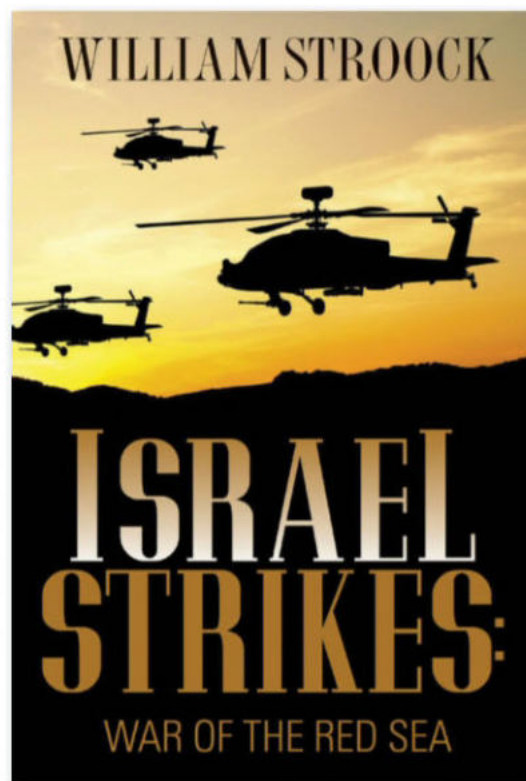
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SUBMARINE KILLERS

From early 20th-Century depth charges, to modern-day ballistic missiles, there are many ways to send a submarine to oblivion

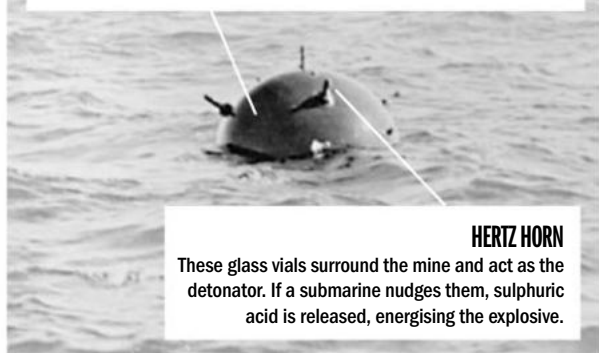
Submarines have been a constant menace since the First World War, when German U-boats began sinking fleets of British and US ships. Their deadly capabilities were originally limited by rules prohibiting attacks on non-military targets. However, the sinking of the RMS Lusitania in 1915 initiated the beginning of unrestricted submarine warfare.

In response, navies worldwide began developing counter measures. This began with basic nets and indicator loops to catch the metal marine beasts, but as sonar developed, so did the anti-submarine weapons. Naval mines and depth charges were the most widespread, but they've since been superseded by rockets and missiles that protect against nuclear submarines.

*Explosion from
a depth charge
dropped by
HMS Ceylon in
January 1944*

VERSATILITY

Naval mines are incredibly versatile and can be used both under water and on the surface. Some can even be remote-controlled.

**HERTZ HORN**

These glass vials surround the mine and act as the detonator. If a submarine nudges them, sulphuric acid is released, energising the explosive.

NAVAL MINES

Origin: Worldwide

Era: Early 20th Century-present

Warhead: TNT/minol/amatol

Range: N/A

The classic way to stop submarines (as well as

ships) was a naval mine. These became popular in the late 19th Century and could prevent submarines from entering large areas of water. Their threat and ease of production make them an important part of psychological and asymmetric warfare

“THEIR THREAT AND EASE OF PRODUCTION MAKE THEM AN IMPORTANT PART OF PSYCHOLOGICAL AND ASYMMETRIC WARFARE”

DEPTH CHARGES

Origin: Royal Navy

Era: 1911-present

Warhead: Torpex

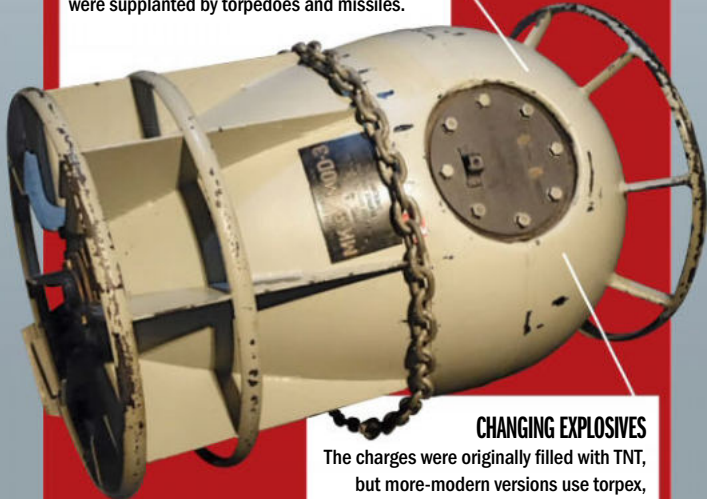
Depth: 91m (300ft)

The original submarine killer; depth charges were simple but effective, detonating as

they sunk underwater. They were first mass-produced in the First World War and could reach a depth of 91 metres (300 feet). They were originally rolled off ships but launchers have also been developed to hurl them further and with greater accuracy.

OUT OF DATE?

Depth charges were originally very effective but as submarines got quicker and deeper; they were supplanted by torpedoes and missiles.

**CHANGING EXPLOSIVES**

The charges were originally filled with TNT, but more-modern versions use torpex, which is 50-per-cent more powerful.

MU90 IMPACT TORPEDO

Origin: Italy/France

Era: 1980s-present

Warhead: Shaped PBX charge

Range: 10,000-23,000m (32,808-75,459ft)

A type of lightweight torpedo (LWT), the MU90 was developed by defence consortium EuroTorp. The projectile can be launched from both ships and submarines and can even be used against other torpedoes. The UK equivalent is the Sting Ray.

**DAMAGE**

A devastating armament, the torpedo will rupture the keels of nuclear and conventional submarines, even if they are double-hulled or deep diving.

ALL-ROUNDER

The MU90 is a good all-round weapon and boasts the ability to function in seas of any temperature or salinity. It can dive down to 1,000m (3,280ft).

ANTI-SUBMARINE ROCKETS (ASROC)

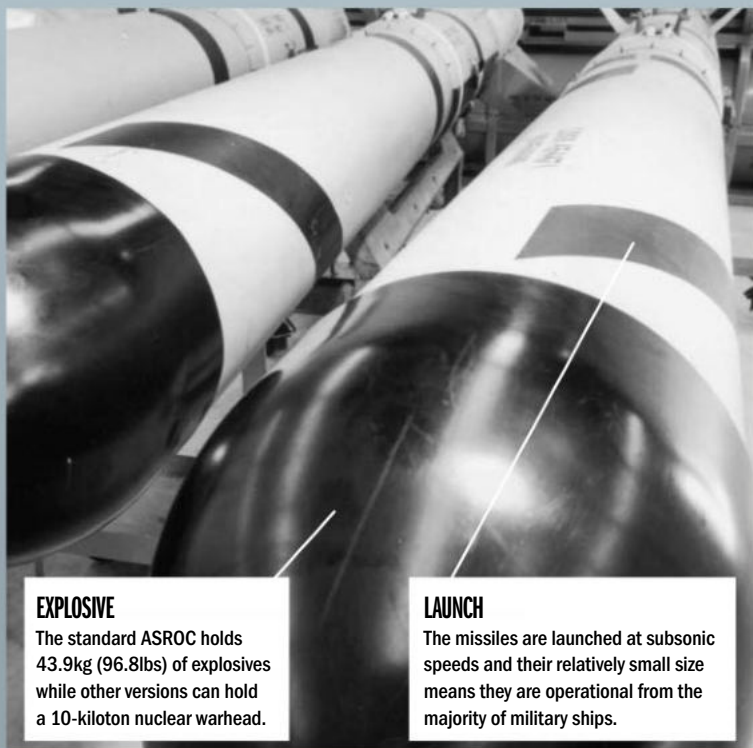
Developer: United States Navy

Era: 1960s-present

Warhead: MK 46 MOD 5 Torpedo with PBX explosive

Range: 19,000m (62,336ft)

From the Cold War onwards, the USA carried anti-submarine rockets on its destroyers and frigates to repel oncoming subs. These RUR-5 systems initially used torpedoes, but have been updated to use even more powerful ballistic missiles against nuclear submarines. Launched into the air, they nose-dive into the water and the built-in propulsion and guidance systems do the rest.

**EXPLOSIVE**

The standard ASROC holds 43.9kg (96.8lbs) of explosives while other versions can hold a 10-kiloton nuclear warhead.

LAUNCH

The missiles are launched at subsonic speeds and their relatively small size means they are operational from the majority of military ships.

THE CAPTURE OF U-505 (1944)

The U-505 had already sunk eight Allied ships in the war, but on 4 June 1944, it was payback time

U-boats were one of the Third Reich's deadliest weapons, constantly threatening the Royal Navy and preventing the transport of troops and vital resources to key strategic locations. The U-505 was just one of these submerged enemies that traversed the world's oceans, hunting in packs. This submarine was assigned to the Atlantic theatre and had already destroyed 44,962 gross register tons of Allied shipping in its career. It was spotted by the USS Chatelain off the west coast of Africa on 4 June 1944. In response, a US Navy task force was raised, armed and ready to attack.

"THE ENEMY WAS LOCATED AND STRUCK WITH A SERIES OF DEPTH CHARGES. HEAVILY DAMAGED, THE U-505 WAS FORCED TO SURFACE – IT WAS NOW A SITTING DUCK"

1 ON THE LOOK-OUT

In the summer of 1944, an Edsall-class Destroyer called the USS Chatelain was scouring the Atlantic depths for Axis submarines. The ship had already sunk the U-515 on 9 April of that year, so was well versed in submarine destruction.

2 U-BOAT SIGHTING

At 11.10am the USS Guadalcanal began to head to the port of Casablanca for refuelling. It was suddenly stopped in its tracks by the sonar operator of the Chatelain, who had sighted what seemed like a German U-boat.

3 READYING ATTACK FORMATION

The sighting proved to be true – the Guadalcanal withdrew as the Chatelain advanced towards the target with support from the Destroyer escorts USS Pillsbury and USS Jenks. A confrontation between them was imminent.

4 OPENING SALVOS

The attack began with a volley of Hedgehogs, a specialised anti-submarine weapon, however, the U-boat was so well concealed that the attacks missed. Two US fighter planes then marked the correct whereabouts of the sub, as the second attack was prepared.

5 STRIKING THE U-505

With the help of the fighters, the enemy was located and struck with a series of depth charges. Heavily damaged, the U-505 was forced to surface – it was now a sitting duck.

6 ATTEMPTED SCUTTLE

With all hope of escape lost, the commanding officer of U-505, Harald Lange, ordered the submarine to be scuttled so the Allies couldn't get their hands on any secret information or technology – namely two Enigma machines.

7 BOARDING THE U-505

The US navy made it to the submarine just in time – its whole stern was submerged and the waterline had reached the conning tower. The boarding party had to disarm the bombs that were put in place to scuttle the ship. Albert David led them as they collected German code books and documents.

8 NO ONE ABOARD

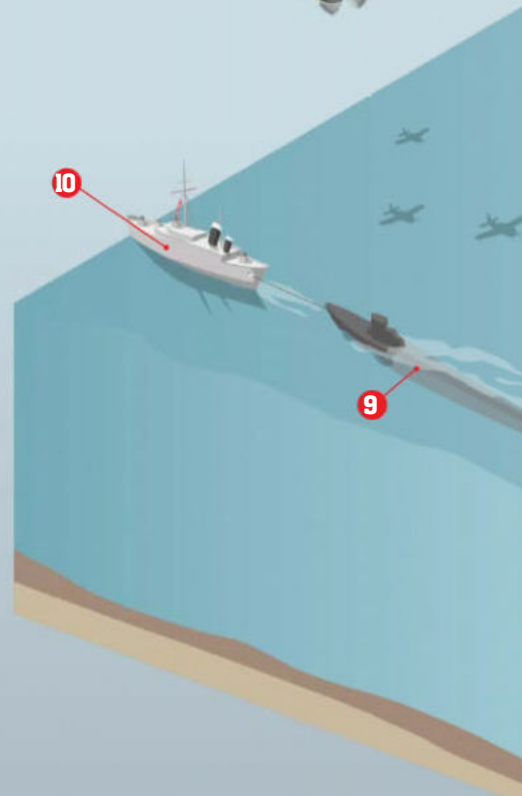
To their surprise, when the US Marines made their way to the German U-boat, they found it almost completely deserted. The Kriegsmarine sailors had fled the confines of the damaged submarine and were now at the mercy of the ocean.

9 THE TOWING OPERATION

After saving as many German sailors as they could, while stopping the submarine from sinking, orders came through that the U-505 was to be towed back to US waters for inspection and examination.

10 BACK HOME AND POWS

The towing operation took three days as the Guadalcanal made its way to Camp Ruston, Louisiana. The remaining 58 U-505 crew members were put into the Ruston prisoner of war camp until the end of the war, when they were returned home.



THE BATTLE FOR THE ATLANTIC

THE IMPORTANCE OF THE ATLANTIC

During WWII Britain relied heavily on the USA to provide munitions and supplies. Hitler was determined to cut this supply line off, so launched full-scale submarine warfare in the Atlantic.



U-BOATS GAIN THE UPPER HAND

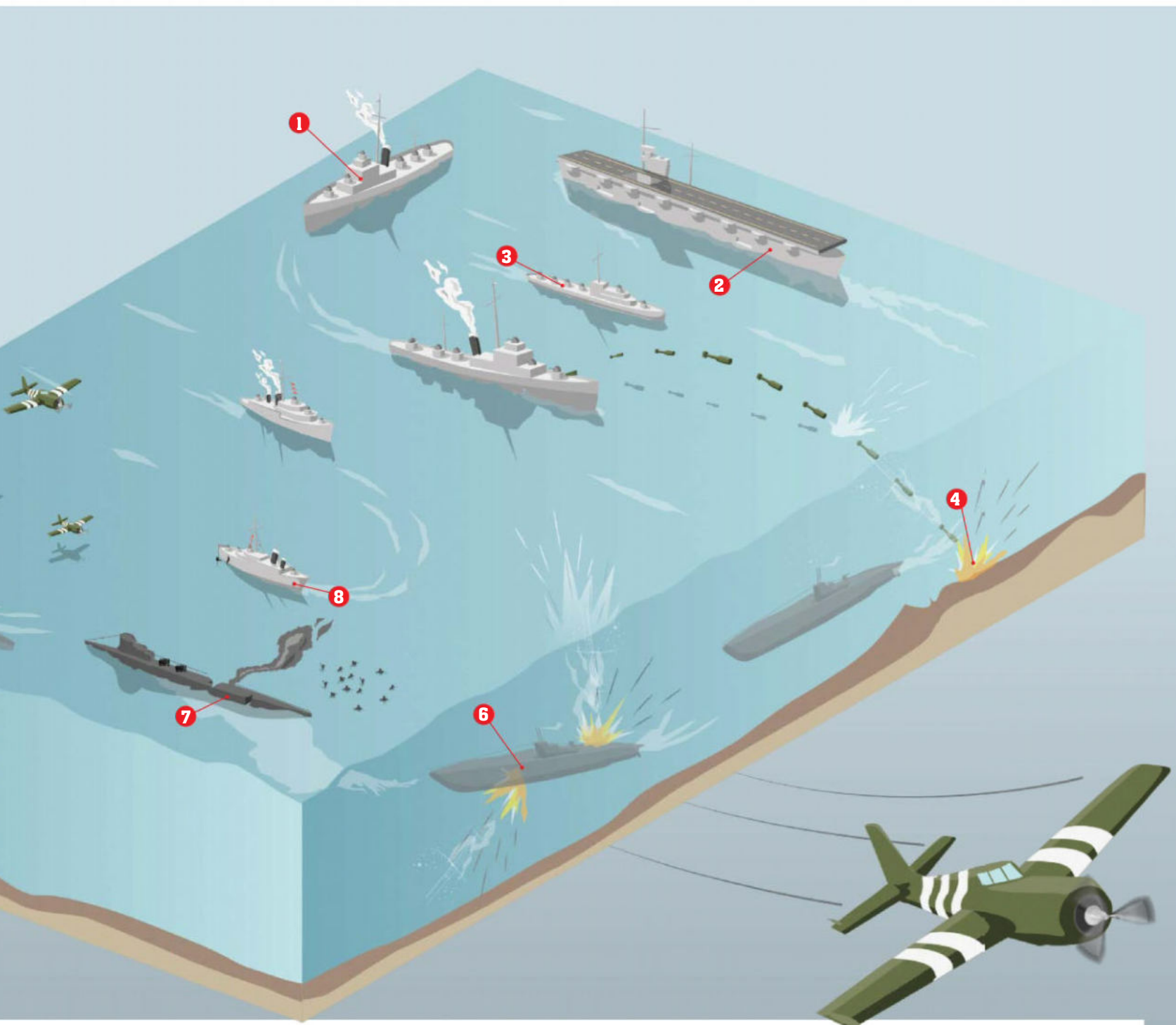
Initially, the British and American navies had no response to the peril beneath the waves, especially in the mid-Atlantic gap where RAF Coastal Command could not help the convoys.



INTELLIGENCE TACTICS

The first Enigma machine was captured in 1941 – now German codes could be cracked and signal traffic read. This helped the Royal Navy make a safer passage to its destinations.





THE ROLE OF THE USA

Pearl Harbor helped the Allied cause in the Atlantic greatly. With the USA now on its side, Britain's war effort was boosted by a huge influx of destroyers and battleships to fight against the U-boats.



FIGHTING BACK

With a shortage of oil, the Allies acted aggressively against the Kriegsmarine. New anti-submarine tactics, long-range radar and an increased use of aircraft helped turn the tide to favour the Allies.



DECLINE OF THE U-BOAT

After 45 sinkings in two months, all U-boats were withdrawn on the 23 May 1943. The battle for the Atlantic had ended and the liberation of Europe was about to begin.



HEAD TO HEAD

If the Cold War had ever heated up, there was plenty of firepower on offer. Here are two opposing nuclear submarines that served in these years of military tension



K-43

SOVIET NAVY, RUSSIAN NAVY

MISSILES

The K-43 was the first Soviet submarine with submerged launch SS-N-7 anti-ship missiles (eight of them, in fact) so it didn't have to make risky surfaces.

TORPEDOES

Either 12 SS-N-15 anti-submarine missiles or 12 torpedoes were fitted to the K-43, giving it a formidable underwater arsenal.

SPEED

Using its single five-blade propeller, the K-43 could reach a speed of 16 knots when surfaced and 23 knots when underwater.

POWER TYPE

A first-generation VM-5 nuclear reactor was used to propel the ship and powered the impressive 20,000shp steam turbine.

TECHNOLOGY

This advanced submarine contained the all-new Snoop Tray surface-search radar, which helped seek out targets for missile strikes.

TOTAL

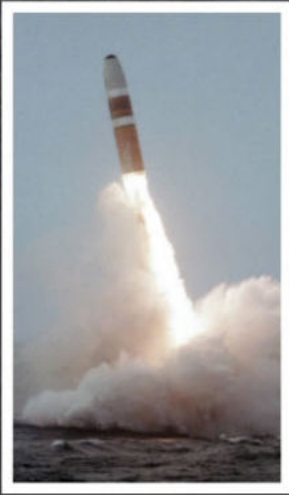


THE PROJECT 670 CHARLIE CLASS

The K-43 was one of 17 submarines in the USSR's nuclear-powered Project 670 Charlie class. The class was split into two, with the K-43 forming the first group of subs. The first batches of Soviet submarines were diesel-electric powered and based on captured German models but, Charlie was part of the new nuclear unit launched in 1967. The class's main role in the Soviet Navy was surprise attacks on aircraft carriers. The model survived the fall of the Soviet Union and was retired in 1994. It was succeeded by the Papa class of submarine, which boasted a titanium hull and a higher top speed.

The K-43 operated in the Soviet Navy until 1988 when it was sold to the Indian Navy

“The class’s main role in the Soviet Navy was surprise attacks on aircraft carriers”



THE JAMES MADISON CLASS

The James Madison class of US submarine was part of the '41 for Freedom' group of 41 submarines that provided nuclear protection for the USA. The class was named after the country's fourth president and replaced the Lafayette class. They originally carried Polaris A-3 missiles but were later modified to carry Trident weapons. To accommodate the advanced missiles, the submarines were fitted with the best guidance and navigation systems money could buy. Ten were made in total and they served the US Navy for over 30 years and were succeeded by the Benjamin Franklin and Ohio classes.

Trident missiles were first introduced in 1979 and are still used by both the US and UK

This submarine was named after Kazimierz Pulaski (1745–1779), a Polish General who fought for the US in the American War of Independence



USS CASIMIR PULASKI

US NAVY

MISSILES

The submarine was armed with either 16 Polaris or Poseidon ballistic missiles that made use of the first ever satellite navigation system, TRANSIT.

TORPEDOES

Four MK-45 nuclear torpedoes were held onboard. An airlock was used to adjust the projectile to the change in atmospheric pressure when launched into the sea.

SPEED

The Casimir Pulaski could easily race to speeds of over 20 knots, giving it a slight pace advantage over its Soviet rivals from the era.

POWER TYPE

Two steam turbines were turned by a S5W nuclear core, a new type of propulsion system that replaced the S1W in 1971.

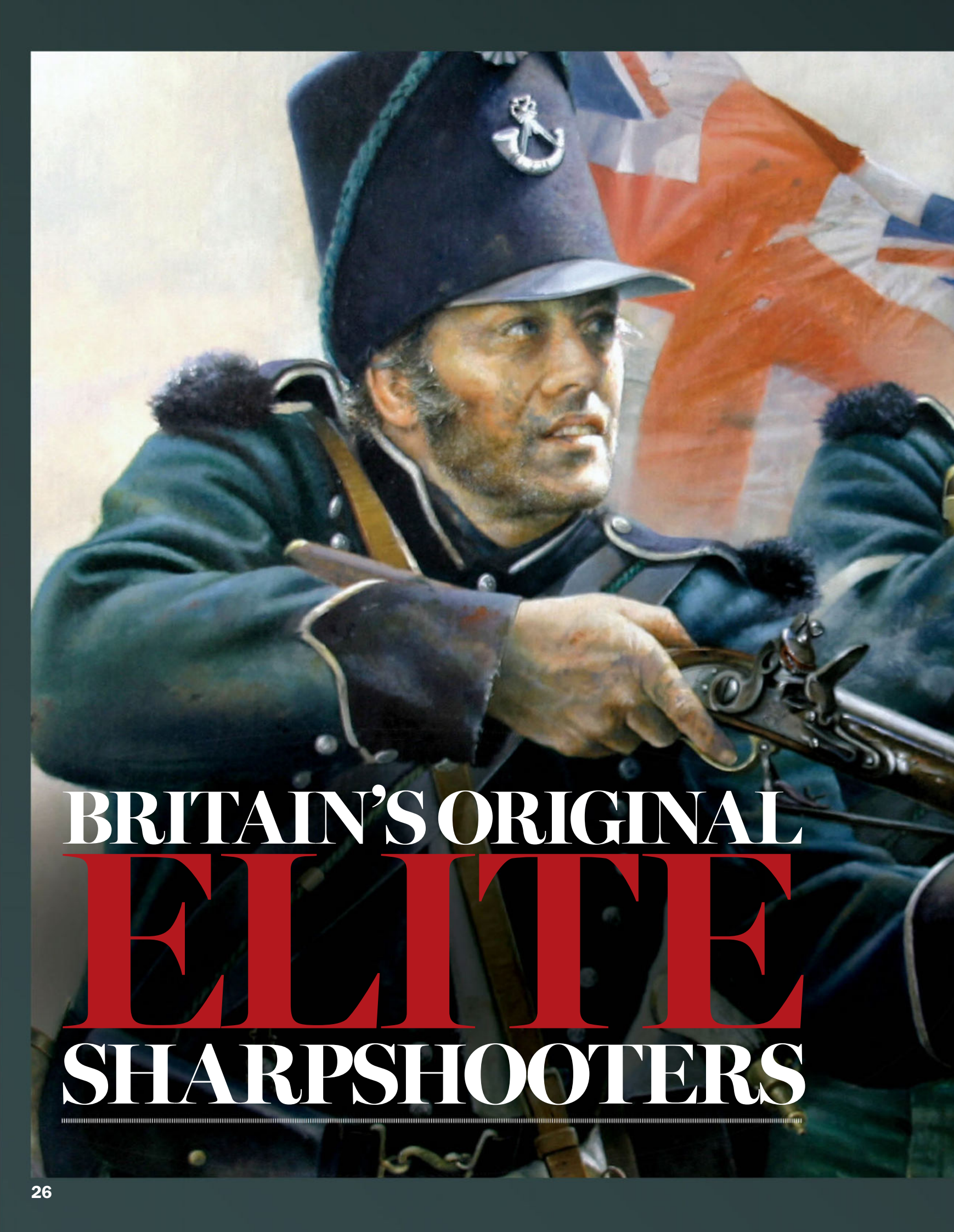
TECHNOLOGY

Noise-dampening technology was used to make the submarine as undetectable as possible and the vessel contained a Trident missile targeting system.

TOTAL



“To accommodate the advanced missiles, the submarines were fitted with the best guidance and navigation systems money could buy”



BRITAIN'S ORIGINAL
ELITE
SHARPSHOOTERS



A vital component in Wellington's victory over Napoleon, the 95th Rifles was the British Army's first elite corps. But what made them such remarkable fighters on the battlefield?

In modern warfare you have the Delta Force and Navy SEALs. In the Second World War you had commandoes and paratroopers. In the Napoleonic Wars, there was the 95th Rifle Regiment. Founded in January 1800, the regiment was a direct response to the British Empire's desperate need to update its infantry. During the Revolutionary War, American troops and their allies easily outmanoeuvred and outthought the British Army using new skirmish tactics and irregular units. The American strategy focused on light troops who would aim and fire with their superior rifles. The British redcoats, on the other hand, used old-style muskets with woeful accuracy that was outclassed by the American alternative. German Jaeger mercenaries, whose role was as an auxiliary to the main infantry, wielded the best rifles in the British Army. What the British needed was a specialised corps that was part of the regular army, rather than a paid auxiliary force that wasn't.

After years of debate in the War Office, the result was the creation of the 95th Rifle Regiment by Colonel Coote Manningham and Lieutenant Colonel The Honourable William Stewart. The two officers addressed the Government, explaining that a corps trained in precision firing, with arms to match, would be an essential part of the progression of the British Army. They had been influenced by British Commanding Officer Colonel Baron de Rottenburg, who had set out a training manual that the two used as a basis for their idea. The plan was approved and the Peninsular Barracks in Winchester was designated as the 95th's brand-new headquarters.

They would be expertly trained at Shorncliffe army camp along with the 43rd and 52nd regiments. It was decided that the new unit would be dressed in green (copied from German Jaegers) for basic camouflage, and armed with the new and improved Baker Rifle. Designed as



The Battle of Waterloo is perhaps the most famous engagement to feature the 95th

a special corps, the 95th would work alongside the traditional redcoat infantry, but would go at its own pace and under its own orders. Unlike the main body of the armed forces who fought in tightly drilled ranks, the riflemen were taught to use their own initiative to get out of sticky situations and take the fight to the enemy rather than following strict direction. They were literally the special forces of their day.

Four months after forming in 1800, these 'sharpshooters, scouts and skirmishers' were sent to Spain to assist the British Expeditionary Force in the War of the Second Coalition. The Ferrol Campaign turned out to be a loss for the British, but the riflemen still made an excellent account of themselves and their fresh tactics were very effective against the Spanish and French troops. Tales tell of the

Praise for the 95th

"I never saw such skirmishers as the 95th. They could do the work much better and with infinitely less loss than any other of our best light troops. They possessed an individual boldness, a mutual understanding, and a quickness of eye in taking advantage of the ground, which, taken altogether, I never saw equalled"

Major John Blakiston, Portuguese Cacadores, Peninsular War, 1807-1814

BAKER RIFLE VS BROWN BESS MUSKET

EXTENSIVE TRAINING AND A STYLISH GREEN JACKET WEREN'T ENOUGH FOR THE 95TH, IT NEEDED A RIFLE THAT COULD PACK A PUNCH AS WELL



BAKER RIFLE

With a high rate of fire and a good shooting distance, the Baker was the preferred rifle of the British Army's elite until 1839.

BROWN BESS MUSKET

From 1722, the Brown Bess was the standard-issue musket of the British Army. It was a good all-rounder, but paled in comparison with the Baker Rifle.

regiment holding a hillside position against waves of Spanish attacks despite the co-founder of the Rifles, William Stewart, being severely wounded from a shot to the chest. Their resolute defence demonstrated the Rifles now an essential part of the army. The British defeat was blamed on the incompetence of the generals and wasn't attributed to the 95th Rifles in any way. The next major engagement that the regiment was involved in was the 1801 Battle of Copenhagen. Led by Vice-Admiral Horatio Nelson, the British fleet overcame its Dano-Norwegian counterparts as the Royal Navy recorded a strategic victory. The 95th was used on the decks of British ships, taking devastatingly accurate pot shots at the rival ships' crews. A year later, on Christmas Day, the regiment's name was officially changed to the 95th Rifle Brigade.

Originally made up of trained mercenaries who could wield the Baker with ease, gradually more and more soldiers from the regular infantry joined up. However, the recruitment methods of the 95th are legendary, if a little exaggerated. Rumours persist that candidates would be encouraged to get drunk, so were

EQUIPMENT OF A 95TH RIFLEMAN

THE REGIMENT'S UNIFORM AND KIT WAS TAILORED SPECIFICALLY FOR ITS ROLE. THIS LIST IS FROM AN ACCOUNT BY 95TH RIFLEMAN SERGEANT EDWARD COSTELLO

SHAKO

The regiment's founder, Coote Manningham, designed the uniform. Unlike the traditional redcoat, the green of a rifleman's shako hat and jacket would blend in with the surroundings, enabling them to strike with the element of surprise.

POWDER FLASK

Horn-shaped, this powder flask would hold the gunpowder required to fire the Baker Rifle. The horn was later replaced by more efficiently shaped flasks that were easier to carry and held more gunpowder.

SWORD AND BELT

If the fight got too close for comfort, the 95th soldier would attach his bayonet. This enabled the 95th to fit seamlessly into a redcoat regiment when their skirmishing duties were fulfilled.

KNAPSACK

A 95th soldier would need supplies if he were to be out in the field for an extended period of time. His backpack would contain around 35 kilograms (80 pounds) of all the equipment needed for operations.

ACCESSORIES

The knapsack would also contain all the personal items the rifleman needed, such as rifle brushes, extra clothes, a canteen and a blanket. The brushes were cut using a billhook that each soldier carried.

FLASK AND TIN

Rations were essential for long trips away from the mess. The average rifleman would carry ingredients that could be cooked over an open fire, as well as cold rations for food on the go.

AMMO POUCH

The ammo pouch or belt contained up to 50 rounds. As the 95th Regiment concentrated on quality over quantity, this would usually be enough for a successful skirmish. The pouch also contained the ramrod used to load the rifle.



The 95th was integral to the successful British bombardment of Copenhagen in 1807, acting as marksmen and picking off Dano-Norwegian troops

RATE OF FIRE

The rate of fire in a rifle was less than a musket and this fact put Napoleon off using them. The gun could only fire off around two rounds a minute but these shots were much more accurate.

FIRING SYSTEM

The Baker Rifle used a flintlock system but unlike a musket, spun the ball when released, increasing its accuracy. It had a slower reload time than the Brown Bess but used leather patches wrapped around the bullet for added precision.

RANGE AND ACCURACY

A trained marksman would hope to hit a target from 200 metres (656 feet) away and a rifle's full range was over three times that of a musket. The aim was to register a hit with every shot rather than fire blindly.

RATE OF FIRE

A trained musketeer could unload up to four shots a minute with the Brown Bess. This didn't mean it was accurate though – with iron balls often spraying all around the battlefield.

FIRING SYSTEM

Muskets of the age also used the flintlock system but contained a smoothbore barrel instead of a rifled one. Quite difficult to operate, they were nevertheless a useful gun but only at their short-range.

RANGE AND ACCURACY

With a Brown Bess, a soldier would only be able to hit a target 100 metres (328 feet) away around 50 per cent of the time. The idea was to create a wall of metal where at least one shot would register a hit.

Battle of Roliça

WITH THE PENINSULA WAR ONLY A FEW MONTHS OLD, THE BRITISH ARMY ENGAGE IN ITS FIRST BATTLE. THE 95TH RIFLES IS READY TO STRIKE

02 STRENGTH IN NUMBERS

The French forces are heavily outnumbered at Roliça, so the 95th is able to pick off individual targets with ease while the British Army soak up the French musket fire.

01 TO BATTLE!

A British expeditionary force has been sent to Portugal to expel the French Army. Led by the 1st Duke of Wellington, the British forces number approximately 15,000, including the 2nd Battalion of the 95th Rifles.

03 IDEAL RIFLE ENVIRONMENT

The rocky and hilly surroundings of the mountainous Portuguese town of Roliça, is an ideal environment for the Rifle corps, which is able to hide among the rock formations and secure the higher ground.

04 FIGHTING IN THE STREETS

During one-on-one fighting, the riflemen's ability is unrivalled, so they picked off the soldiers of the 3/4th Legere with ease in brutal house-to-house combat.

05 THE BATTLE IS WON

Dominating the left flank, the 95th Rifles survive a counterattack and push the French skirmishers back. The French forces flee down the Lisbon road, leaving their artillery in the hands of the British.

THE PLUNKET POSITION

LYING DOWN AND USING THE STRAP TO BALANCE, THE RIFLEMAN WAS WELL SET TO AIM AT WHATEVER OR WHOEVER HE PLEASED

TARGETING THE HIERARCHY

A rifleman's speciality was to target high-ranking officers on the battlefield. A successful hit would cause panic in the enemy ranks. The increased range of the Baker Rifle enabled 95th soldiers to do this undetected.

SKIRMISHING WARFARE

Riflemen in the Napoleonic era were deployed to be lightly armed and nimble. Their accurate shots would harass the enemy lines before a full onslaught by the main company. It wasn't long until every army employed these tactics.

SHARPSHOOTING

Legend states that a rifleman of the 1st Battalion of the 95th Rifles, Thomas Plunket, struck French general Auguste François-Marie de Colbert-Chabanais from a distance of between 250 metres (820 feet) and 700 metres (2,300ft) while in this position.



more inclined to join. There is even a story of an officer handcuffing himself to a recruit and only agreeing to release him if he agreed to sign up. Whatever the methods were, joining the 95th was still a much more attractive proposition than the regular army. After the name change and a brief expedition to liberate Hanover from the French in 1805, the 95th was summoned to South America in 1807 for an all-new mission. The Napoleonic Wars had spread across the Atlantic and the British forces were battling Spain for domination of the colonies. The 95th was extremely useful in the Battle for Buenos Aires, acting like modern-day snipers and striking the fortress from the safety of the city cathedral's towers. The age of the 95th Rifles had begun.

The regiment was ahead of its time. The unorthodox methods were simply not understood by

“The 95th Rifle Brigade was ahead of its time”

some generals and their innovative approach shocked many rival armies into action, as they attempted to form their own hastily arranged equivalents. Even the 95th's hierarchy was different to the main body of the army. Officers were actively encouraged to form close bonds with their men – playing games and dancing, it was suggested, would stop the company from smoking, drinking and chasing women. Essentially, there was a big drive to keep the men's minds focused and play down social barriers – they were that important to the army. Their importance was shown in training as well, where they were given the opportunity to



At Roliça the British forces outnumbered the French and dominated in both rural and urban warfare, with the 95th acting as a specialist arm

KNEELED POSITION

IF A RIFLEMAN CAUGHT SIGHT OF AN ENEMY, THEY WOULD CROUCH OR KNEEL DOWN TO TAKE A STABLE SHOT

UNIQUE TACTICS

Blending in with the surroundings and not looking like any other soldier on the battlefield, the 95th corps was the first of its kind. The ability to strike any enemy officer of their choice at will began to change warfare.

THE GREEN BOOK

The regiment was so well organised that it even had its own unique training manual. The *Green Book* advised 95th riflemen to act as the eyes and ears of the infantry and trusted them to act using the initiative gained from their training.

SQUAD WARFARE

The 95th would split into squads of between four and eight men. They would occupy the flanks of the main army and avoid cavalry at all costs. Kneeling in their flanked positions, they could harass the enemy with steady, accurate shots.



THE BATTLE OF FUENTES DE OÑORO

This 1811 battle from the Peninsula War lasted three days and was an attempt by the French Empire to put an end to the British siege on the city of Almeida. 37,000 British, Portuguese and Spanish troops advanced on the fortress, but 48,000 French soldiers were determined not to let this happen. The French assault severely weakened the British ranks, but with the help of the 95th Rifles picking off targets with ease, the citadel was held as the French advance lost momentum.



improve their marksmanship with the luxury of practicing with live ammunition.

The 95th was equally effective in small encounters as it was in large pitched battles. An example of this was the Battle of Cacabelos, where young rifleman Thomas Plunket showcased the true power of the regiment. The British Army was in retreat after being driven back by the French towards the Spanish city of A Coruña. Eventually, with nowhere else to run, the British were forced to take a stand outside the small village of Cacabelos. During an even battle, with around 200 men wounded on either side, the turning point came when Plunket took the initiative and advanced solo towards the French ranks. He steadied himself in a laid-down position and fired a shot from long distance that struck the French Commander Colbert-Chabanais, killing him instantly. The French soldiers were shocked by this sudden assault, as they firmly believed they were out of range of any British firearm. With this, the Grande Armée ended its pursuit and the British could fight another day. After this battle, Lieutenant-General Sir John Moore praised

the 95th for its gallant manner in the face of superior numbers. The French would proceed with caution if they ever caught sight of the 95th Rifles again.

The specialised corps showed its versatility and prowess once more at the Battle of San Marcial, which turned out to be Napoleon's last offensive in Spain. In this conflict, a 70-man company of the 95th successfully defended the small village of Bera against an astonishing number of French. The small band of elite soldiers held out for two hours against 5,000 men, protecting the rest of the British Army as it regrouped half a mile away. The riflemen were only beaten by a desperate French cavalry charge and a lack of powder just before dawn.

A failed attack on Buenos Aires in 1807 is one of the few stand-out failures of the regiment. Losing high numbers of both officers and men, it can be speculated that the generals weren't quite sure of the best way to harness their abilities just yet. Overall though, the British Army was dominant in the war, and if it weren't for the Convention of Sintra (a signed agreement that allowed the reeling French Army

“The French would proceed with caution if they ever caught sight of the 95th Rifle Regiment again”

1800.	FIRST LIST OF OFFICERS.	5
<i>Colonel.</i>		
COOTE MANNINGHAM.		
<i>Lieutenant-Colonels.</i>		
THE HONOURABLE WILLIAM STEWART.	ALEXANDER HOUSTON.	
<i>Majors.</i>		
GEORGE CALLANDER.	HAMLET WADE.	
<i>Captains.</i>		
ROBERT TRAVERS.	THOMAS SIDNEY BECKWITH.	
CORNELIUS CUYLER.	TIMOTHY HAMILTON.	
THOMAS CHRISTOPHER GARDNER.	ALEXANDER STEWART.	
HENRY SHEPHERD.		
<i>Captain-Lieutenant.</i>		
ALEXANDER D. CAMERON.		
<i>First Lieutenants.</i>		
BLOIS LUNCH.	JOHN ROSS.	
J. A. GRANT.	EDWARD BEDWELL LAW.	
JOHN STUART.	HENRY POWELL.	
PETER O'HARE.	WILLIAM COTTER.	
THOMAS STIRLING EDMONSTON.	JOHN CAMERON.	
ROBERT DUNCAN.	— DOUGLAS.	
ALEXANDER CLARKE.	L. H. DENNEY.	
NIEL CAMPBELL.		
<i>Second Lieutenants.</i>		
HENRY GOODE.	PATRICK TURNER.	
JAMES MACDONALD.	SAMUEL MITCHELL.	
THOMAS BREKTON.	GEORGE ELDER.	
LOFTUS GRAY.	JAMES PENDERGAST.	
JOHN JENKINS.	JOHN BURTON.	
<i>Pymaster.</i>		
JAMES INNES.		
<i>Adjutant.</i>		
J. A. GRANT.		
<i>Quarter Master.</i>		
DONALD MACKAY.		

This illustration from the 1804 Manual of Rifle Drill and Firing Positions, written by Ezekiel Baker, illustrates the various shooting positions that the regiment employed



Right: This extract shows the accuracy of the Baker Rifle at both 100 and 200 yards

'WITH THE RIFLES TO WATERLOO'

This exhibition, at the The Royal Green Jackets museum in Winchester, marks the bicentenary of the Duke of Wellington's victory at the Battle of Waterloo on 18 June 1815. It addresses the buildup and aftermath of the battle and uses the Museum's huge diorama of the battlefield to explain what happened. It highlights why the outcome was a

defining moment in British and European history and why the lessons to be learned are still relevant today. The exhibition also focuses on the 'Road to Waterloo' from the outbreak of the French Revolution in 1789, including the creation of rifle and light infantry regiments in the British Army, the Peninsular War and the 100 Days that preceded Waterloo. This must-see exhibition will interest, educate and inspire visitors of all ages. www.royalgreenjackets.co.uk



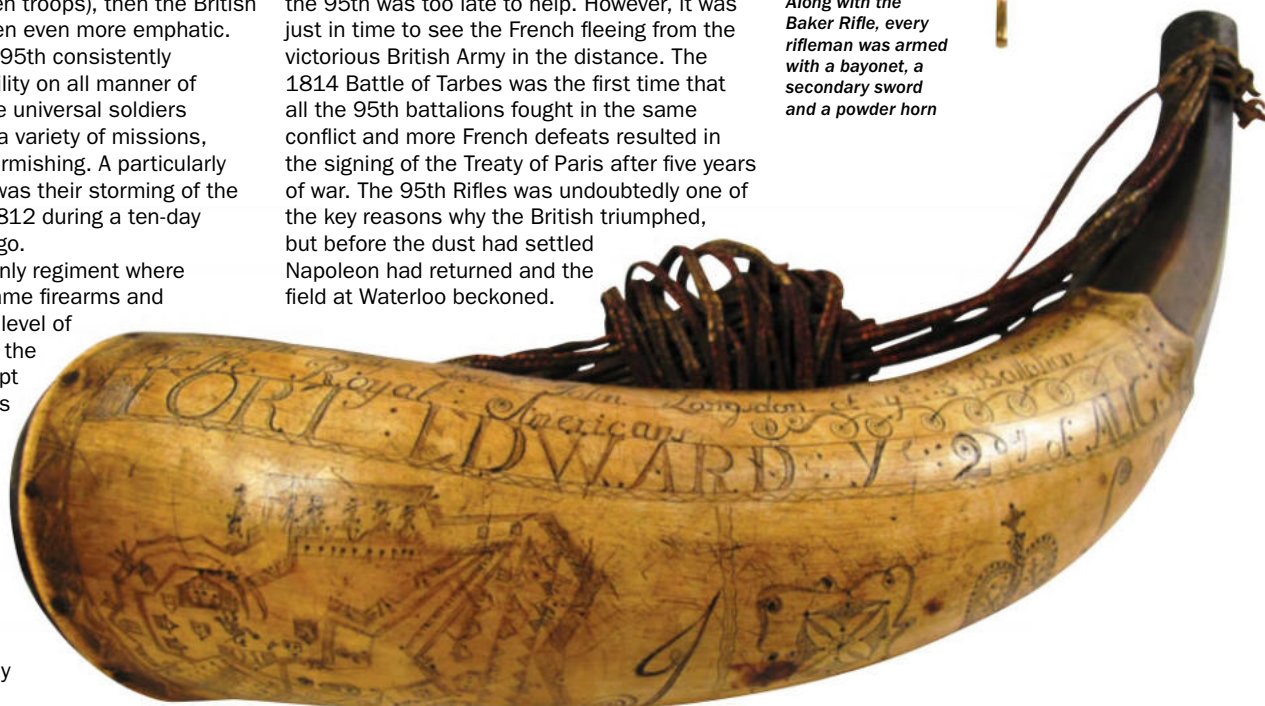
to evacuate its stricken troops), then the British victory could have been even more emphatic.

The riflemen of the 95th consistently displayed their versatility on all manner of battlefields. They were universal soldiers that could undertake a variety of missions, rather than merely skirmishing. A particularly memorable advance was their storming of the beaches in January 1812 during a ten-day siege of Ciudad Rodrigo.

The 95th was the only regiment where officers carried the same firearms and engaged at the same level of warfare as the rest of the company. In an attempt to assist British troops at Talavera on their return to Portugal after the Convention, a 68-kilometre (42-mile) trek was made by the regiment. The march only took 26 hours, despite the intense Spanish heat, but unfortunately

the 95th was too late to help. However, it was just in time to see the French fleeing from the victorious British Army in the distance. The 1814 Battle of Tarbes was the first time that all the 95th battalions fought in the same conflict and more French defeats resulted in the signing of the Treaty of Paris after five years of war. The 95th Rifles was undoubtedly one of the key reasons why the British triumphed, but before the dust had settled Napoleon had returned and the field at Waterloo beckoned.

Along with the Baker Rifle, every rifleman was armed with a bayonet, a secondary sword and a powder horn



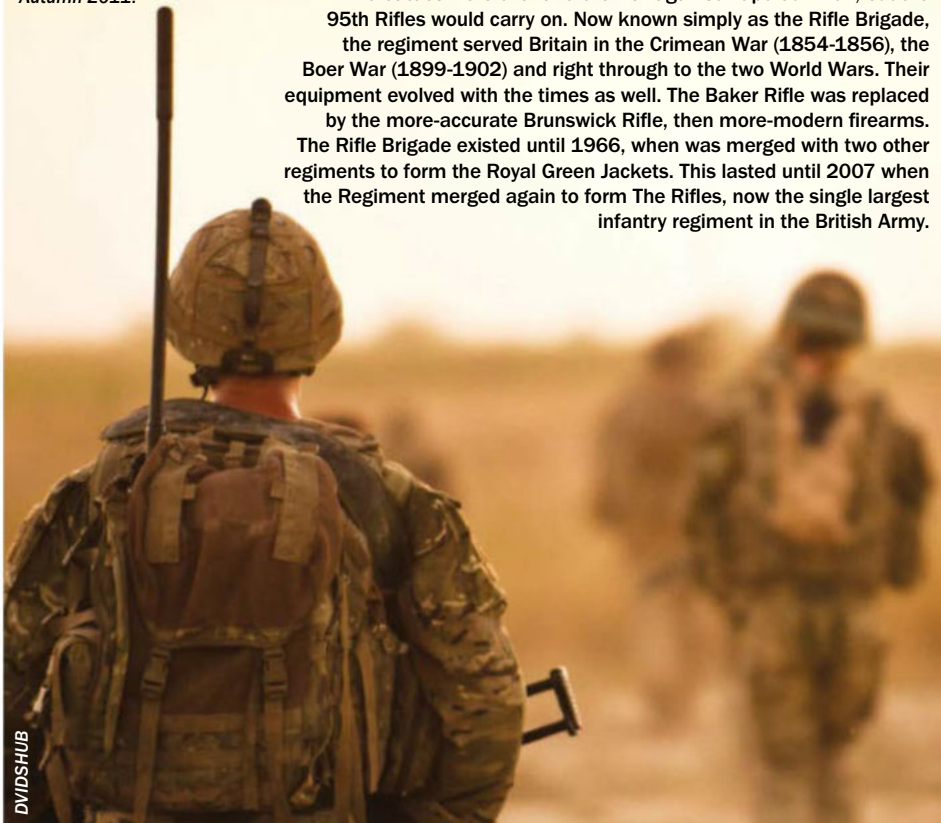
The Duke of Wellington rallies the redcoats at the Battle of Waterloo in a painting by Robert Alexander Hillingford



When news of Napoleon's escape from exile on the island of Elba reached London, the British Army was mobilised to put the Emperor down once and for all. The reinvigorated and new-look 95th Rifles was ready to hammer the last few nails into Napoleon's proverbial coffin. Prior to Waterloo, the regiment engaged in the Battle of Quatre Bras, where the operation didn't go quite as planned. Although a tactical draw against the Grand Armée, strategically the British were beaten and unable to relieve their Prussian allies from the French divisions. This seemed to have an affect on the 95th in particular. Accounts state that due to battle exhaustion and stress, around 30 men from the Regiment deserted their battalion. After years of fighting, this band of brothers had been torn apart at the seams. Luckily, the regiment was able to regain its composure a few days later at Waterloo. As the famous battle began, three battalions of the Rifles were positioned at the front of Wellington's ranks, so they could do the most damage to the opposition. They were ably supported by the King's German Legion (made up of Hanoverians still loyal the British monarch), which defended La Haye Sainte, a walled farmhouse that was a key strategic position in the battle.

As a reward for the regiment's bravery at the Battle of Waterloo, the 95th moniker was officially removed by the Duke of Wellington, rendered largely meaningless as other newly-formed units were being disbanded. The newly formed Rifle Brigade was now an official long-term specialised corps ready to answer, whenever Britain called.

Commandos attached to The Rifles on patrol in Helmand Province in Autumn 2011.



DVIDSHUB

WHAT HAPPENED TO THE 95TH RIFLES?

The battles were over and the war against Napoleon won, but the 95th Rifles would carry on. Now known simply as the Rifle Brigade, the regiment served Britain in the Crimean War (1854-1856), the Boer War (1899-1902) and right through to the two World Wars. Their equipment evolved with the times as well. The Baker Rifle was replaced by the more-accurate Brunswick Rifle, then more-modern firearms. The Rifle Brigade existed until 1966, when was merged with two other regiments to form the Royal Green Jackets. This lasted until 2007 when the Regiment merged again to form The Rifles, now the single largest infantry regiment in the British Army.

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ICON OF WAR CAVALRY SABRE

Delivered from horseback, a slice of cold curved steel was a devastating weapon on the 19th-Century Napoleonic battlefield

The first sabre-like swords or scimitars were brought over to Europe in the 18th Century, having been copied by the imperial powers from Asian mamelukes. There were both light and heavy versions and the latter's 36-inch blade could slice limbs in a single blow.

They were made from 1055 carbon steel, which is tough and durable. After the Americans used these sabres to great effect in the American War of Independence, the British decided to design their own: the 1796 light cavalry sabre. Extremely effective in the Napoleonic Wars, the lightweight, curved blade

enabled a quick slicing action when delivered from horseback. It was so well received that the Prussian government ordered 6,000 of them and updated the sword. With its extended blade and focus on slashing rather than thrusting, it increased the value of cavalry on the battlefield as they were slowly phased out.

USE AND TECHNIQUE

For a sabre to be at its most devastating, the trooper would put his arm out as far as it would stretch so the enemy's weapons would slide off the guard. When faced with a rifleman, cavalry had to act swiftly as their only hope was to strike first.

HOOKS

Attaches to the soldiers side

HILT

HOOD

Metal back aids stability

GRIP

Wood covered in leather

BUTTON

Holds blade and hilt together

GUARD

Protects user's hand

FERRULE

Prevents over-tightening of handle

This iconic oil painting portrays the cavalry sabre being held by an officer of the French imperial Horse Guard during the Napoleonic era





In their prime, heavy cavalry could have a devastating effect on infantry

LANCERS, HUSSARS AND DRAGOONS

There were various types of cavalry in the 18th and 19th Centuries, which all had different roles on the battlefield. Hussars and lancers were light cavalry, dragoons medium and cuirassiers were heavy. The lighter units were useful for scouting and engaging infantry while the heavier divisions broke enemy lines and were the ultimate shock troops of the age.

A model 1809 cavalry sabre

SCABBARD

Protects the blade when not in use

BLADE

Designed for slashing not thrusting

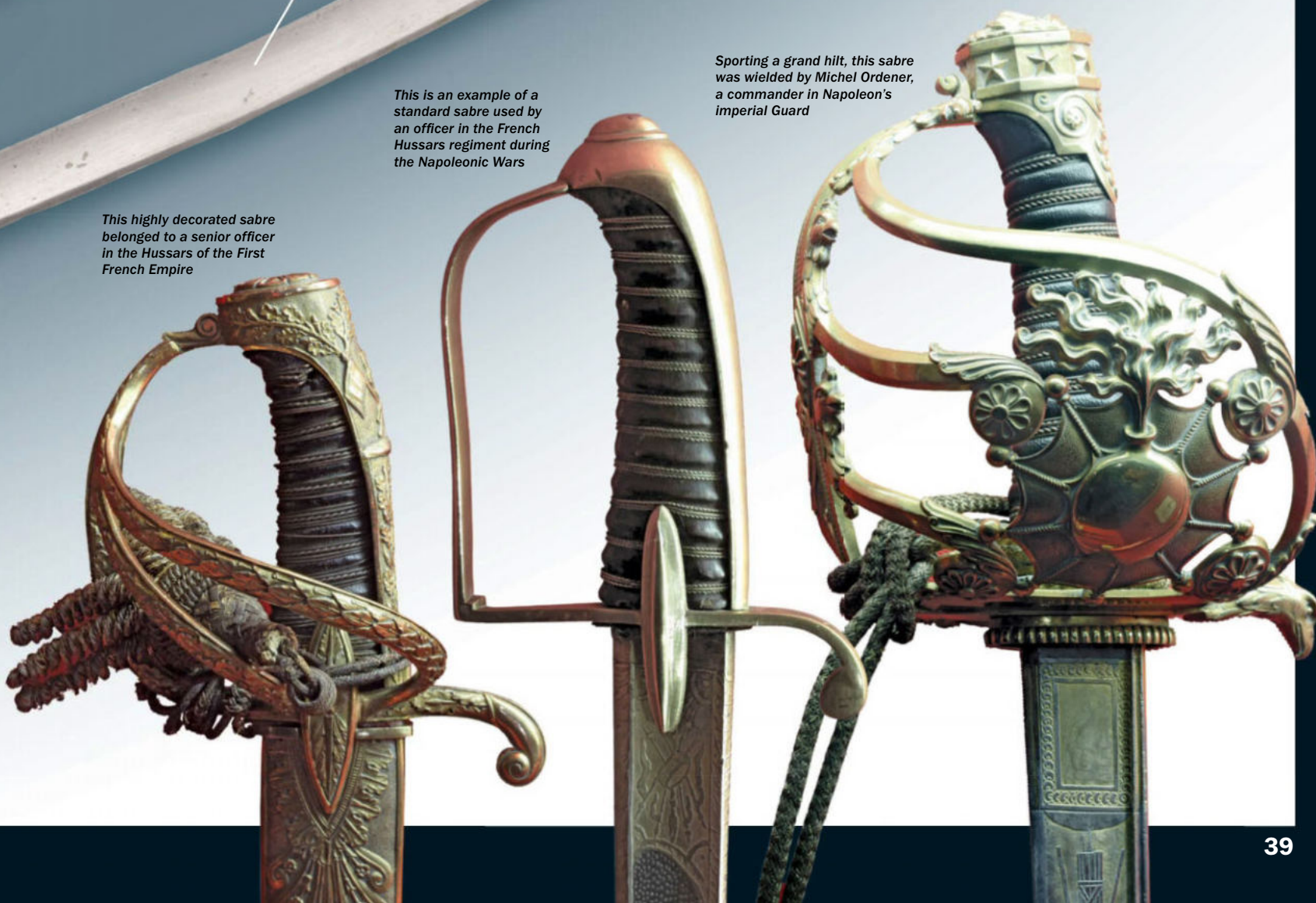
SABRE DESIGN

The hilt of a cavalry sabre could come in all shapes and sizes depending on which army you served, which regiment you were in and how sizeable your 19th-Century wallet was. Some had extravagant decorations adorned over the handle that also helped protect the soldier's hand and increased grip. The blade could also be decorated with insignias engraved into the edge. A weapon of high quality throughout the 18th Century, the cavalry sabre belonged to grenadiers and cavalry units on all sides during the Napoleonic Wars. As well as being effective in battle, they had the status as a ceremonial weapon and are still used in parades and formal processions.

This is an example of a standard sabre used by an officer in the French Hussars regiment during the Napoleonic Wars

Sporting a grand hilt, this sabre was wielded by Michel Ordener, a commander in Napoleon's imperial Guard

This highly decorated sabre belonged to a senior officer in the Hussars of the First French Empire



25 GREATEST LAST STANDS



A depiction of Custer's
infamous last stand on
the ridge – later known as
Custer Ridge

Take a look back through military history to discover some of the most courageous final stands to take place on the battlefield

In the heat of the battle, the last stand is perhaps the ultimate act of heroism, or sheer desperation. Whether it's dogged determination to preserve honour, or simply to defend the lives and homes of others, taking that defiant stand against the odds – often facing death – is the stuff that legends of warfare are truly made of. Those who have made gallant last efforts to hold a position and continue the fight against all the odds have done so with exceptional bravery, the likes of which is rare and worthy of a prominent place in history.

To remind us of some of these famous and little-known inspiring acts, here are some of the greatest ever – from the ancient battles between Greeks and Persians, to the Battle of Waterloo and into the 20th Century.



CUSTER'S LAST STAND

THE BATTLE OF LITTLE BIGHORN

25-26 JUNE, 1876

GENERAL CUSTER'S CAVALRY ARE OVERPOWERED BY THE COMBINED FORCES OF INDIAN TRIBES, LEADING TO ONE OF THE US MILITARY'S MOST NOTORIOUS DEFEATS

Fought between the 7th Regiment of the US Cavalry and the Lakota Sioux, Northern Cheyenne and Arapaho tribes, the Battle of the Little Bighorn was part of a much larger campaign to force Native Americans into reservations during the Great Sioux War.

In 1868 many Lakota leaders agreed to the Fort Laramie Treaty, agreeing to give up the nomadic life that often brought them into conflict with other tribes and US settlers. But some leaders, including Sitting Bull and Crazy Horse, rejected the reservation system – leading to the government to hand matters over to the military.

General Philip Sheridan, commander of the Military Division of Southwest Missouri, devised a strategy to find and to engage the Lakota and Cheyenne, now considered hostile, hoping to force them back to the Great Sioux Reservation. Three forces of men numbering just under 2,500 were sent out to assist – this included the 7th Cavalry of Lt. Col. George Armstrong Custer.

But the expedition proved harder than planned – communication between the three forces was problematic. Even worse, it was difficult to find the nomadic Indians, determine how long their villages would settle for, or in which direction they could travel next. At the time of the battle, the tribes had come together at a village in south-central Montana, strengthening their numbers considerably.

On 22 June, Custer and his 7th Cavalry split from the main force to make a wide flanking march and approach the tribes from the east and south, preventing them from scattering. General Alfred Terry and Colonel John Gibbon, with their infantry and cavalry, would act as a blockade from the north.

Custer marched through the night and on the morning of 25 June, the 7th Cavalry positioned near the Wolf Mountains about 12 miles distant from the Native American encampment

AGAINST THE ODDS

Number of defenders: 600 approx

Number of attackers: 1,800 approx

Attacking advantage: Greater numbers, skilled warriors, wide array of weaponry.

Defending disadvantage: Poor communication, divided numbers, rushed and unplanned charge into battle.

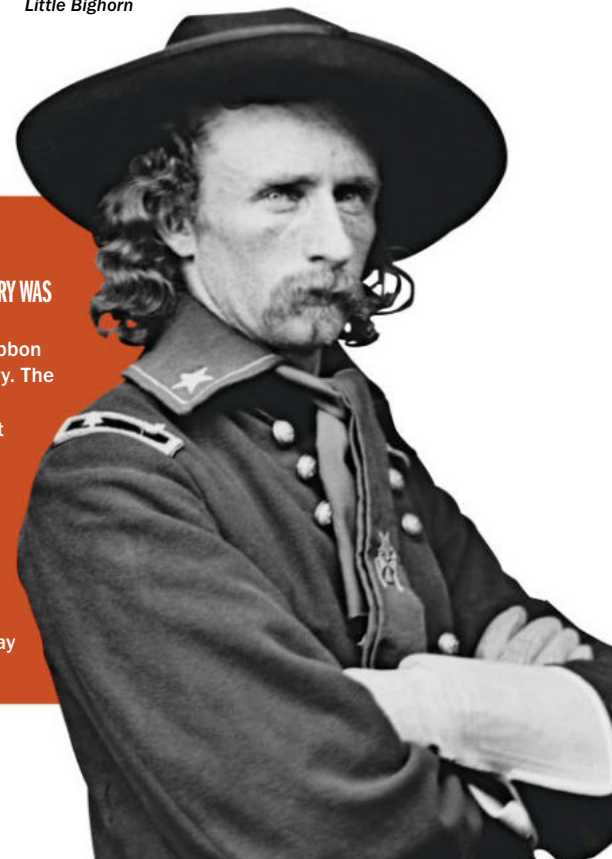
along the Little Bighorn River. Custer initially planned to hide and launch an attack at dawn, but believing his presence had already been detected and the element of surprise lost, he ordered an immediate advance. In the village there were around 8,000 Native Americans in total, 1,800 of which were warriors.

Custer divided the regiment into four, with himself commanding a force of 210 men. Another group, commanded by Major Marcus Reno, was quickly forced to withdraw after being overpowered by Cheyenne and Sioux warriors and suffering heavy casualties. As they retreated on horseback, the warriors galloped alongside, pulling them off their saddles and shooting them at close-range.

Custer's men entered the village from the other side, but great numbers of Cheyenne and Sioux turned back and charged into them, forcing Custer back to a long high ridge.

Meanwhile the Oglala Sioux, under the command of Crazy Horse, doubled back and enveloped Custer's men in a pincer movement, hammering them with arrows and gunfire. As the enemy closed in, Custer ordered his men to shoot their horses and stack the carcasses to form a wall, but this proved to be inadequate protection. Within an hour they were all dead.

General George A. Custer photographed in his Brigadier General uniform in 1863, 13 years before his death at Little Bighorn



The Aftermath

ONE OF THE BIGGEST DISASTERS IN AMERICAN MILITARY HISTORY WAS AN ICONIC BUT BRUTAL VICTORY FOR THE NATIVE AMERICANS

The next day the combined forces of Terry and Gibbon arrived to relieve what remained of the 7th Cavalry. The bodies of Custer's men were found mostly naked and mutilated. Inexplicably, Custer's body was not scalped or mutilated, though likely because the warriors didn't know who he was. The Indian encampment broke up, with many of the number returning to reservations, sensing there would be significant backlash to the defeat and that their traditional way of life was largely over. What remained of the hostile Native American forces was defeated as the Great Sioux War ended in May the following year.



SEPTEMBER, 1918

THE ARIZONA BALLOON BUSTER'S FINAL FLIGHT

LT. FRANK LUKE IN THE MEUSE-ARGONNE OFFENSIVE

FAMED FOR HIS SKILLS AT SHOOTING DOWN ENEMY OBSERVATION BALLOONS AND FIGHTER PLANES, LT. LUKE WAS ONE OF THE US ARMY'S TOP PILOTS – AND APPARENTLY FEARLESS

Arizona native Lt. Frank Luke, Jr (1897-1918) was one of the USA's top airmen during the First World War. In the three weeks leading up to his death, he was credited with shooting down 14 German observation balloons and four fighter planes – a record that was not beaten in the four-year war. He was also well known for disobeying orders and taking to the skies alone, which earned him a reputation among his fellow servicemen.

His final flight came in the first phase of the Allies' Meuse-Argonne Offensive on the Western Front. Lt. Luke took to the skies alone, heading behind enemy lines in the vicinity of Dun-sur-Meuse, north-east France. He was chased by eight aircraft and faced heavy ground fire, but still destroyed three observation balloons. He was hit in the chest by a machine gun while circling low to the ground and was forced to land his SPAD XIII biplane in a field near the village of Murvaux. On his way down, he strafed six German soldiers.

Despite his serious injury, Luke managed to scramble from his plane and attempted an escape, but collapsed after just 200 yards. Defiant to the very end, he pulled out his revolver and fired at the German soldiers who had finally found and surrounded him. He then died from his gunshot wound to the chest.

Lt. Frank Luke was the first airman to ever be awarded the Medal of Honor, and is remembered as one of the US Air Force's most-daring and dynamic pilots.



Lt. Frank Luke stands with the wreckage of one of his planes destroyed on a successful daredevil mission to bring down enemy balloons and aircraft



AGAINST THE ODDS

Number of defenders: One

Number of attackers: Hundreds

Attacking advantage: After crash-landing in France, Lt. Luke was entirely alone – an easy target with no backup.

Defending disadvantage: Fatally wounded, six miles behind enemy lines, no the fighter ace had no automatic firepower

THE SACKING OF ROME

SWISS GUARDSMEN FIGHT TO THE LAST

6 MAY, 1527

NUMBERS: ROMAN MILITIA: 20,000 SWISS GUARD: 500

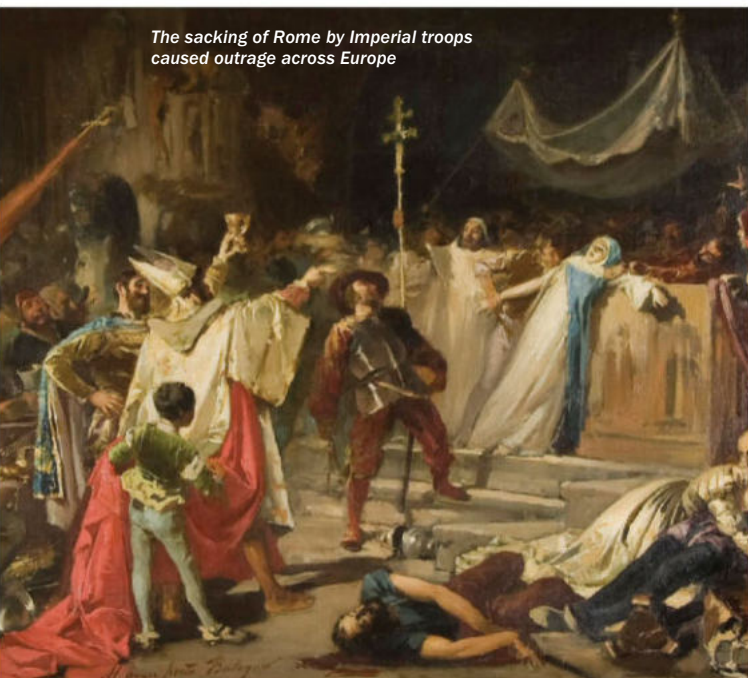
After defeating French invaders, Roman soldiers were incensed that Emperor Charles V couldn't pay them their wages. They mutinied in the thousands and headed to Rome to pillage its richest treasures – not only that, they intended to murder Pope Clement VII.

As the mutineers ransacked the city, the Swiss Guards – the Catholic Church's elite troops – fought back, despite being significantly outnumbered. Down to just 183 men, the Guard formed a defensive square on the steps of St. Peter's Basilica, the church within the Vatican City, fighting off the mutinous soldiers. What followed was essentially a massacre, as the Imperial troops cut through the few but defiant Swiss Guards.

While the guards' efforts to hold the soldiers off long enough for the Pope to escape were successful, up to 12,000 people in Rome were killed in the sacking. The event would mark the end of the Roman Renaissance, and irreparably damage the relationship between the Emperor and Catholic Church.



The sacking of Rome by Imperial troops caused outrage across Europe



BATTLE OF KARBALA

10 OCTOBER, 680CE

In a battle that took place in what is now Iraq, the Umayyad caliph Yazid's army of thousands clashed with the grandson of Muhammad, Hussein Ibn Ali, and his followers – numbering just 70. All were killed while making their stand, and they are still mourned today by Shia Muslims.

BATTLE OF KOROMO RIVER

15 JUNE, 1189

Stood alone on the drawbridge of Koromogawa no tate, the warrior monk Saito Musashibo Benkei held back an entire army. Inside the castle, his lord had retreated to commit seppuku, having been defeated in a conflict with his own brother. Benkei killed over 300 men before he eventually died standing, riddled with arrows.



PASIR PANJANG

13 FEBRUARY, 1942

In a combined Allied effort, 1,400 Malay, British and Australian soldiers battled 13,000 Japanese troops to save Singapore. In the dying hours, Malay Lieutenant Adnan Bin Saidi led a 42-man platoon against thousands. He was tortured and executed for causing unexpectedly high numbers of Japanese casualties.



VIVE L'FRANCE THE BATTLE OF CAMERON

30 APRIL, 1863 NUMBERS: MEXICO: 2,500 (APPROX) FOREIGN LEGION: 65

During the Siege of Puebla, Mexico, in 1863, France sent a shipment of supplies to Veracruz under the protection of the 3rd company of the Foreign Regiment. The company, whose mission was an effort to support Napoleon III's campaign, would become the foundation of the Legion's unofficial, and somewhat morbid, motto: "The Legion dies, it does not surrender".

When Captain Jean Danjou and his company were ambushed by a Mexican force, the French troops made a spirited retreat to a nearby hacienda, beginning a siege that would last over ten hours. The legionnaires

stood with their backs to the wall, fighting back every attack and charge until only five of them remained, with no ammunition.

Rather than surrender, the men fixed bayonets to their weapons and charged, shouting "Vive l'France!" Eventually, the last two were overpowered, but they negotiated their surrender in exchange for keeping their regimental colours and weapons, carrying their dead, and having their wounded lieutenant treated on the battlefield. The French Foreign Legion continues to celebrate the gallant effort each year on 30 April, known as Camerone Day.



HOUSECARLS RESIST THE BATTLE OF HASTINGS

14 OCTOBER, 1066

After William the Conqueror feigned a retreat, King Harold's infantry followed and were ambushed in the open field. Harold and his housecarl bodyguards stood fast on the ridge, awaiting William's final charge. Harold was killed with an arrow to the eye and the Saxon forces retreated. The housecarls surrounded the king's body and fought to their death.



LAST STAND OF THE TIN CAN SAILORS THE BATTLE OFF SAMAR

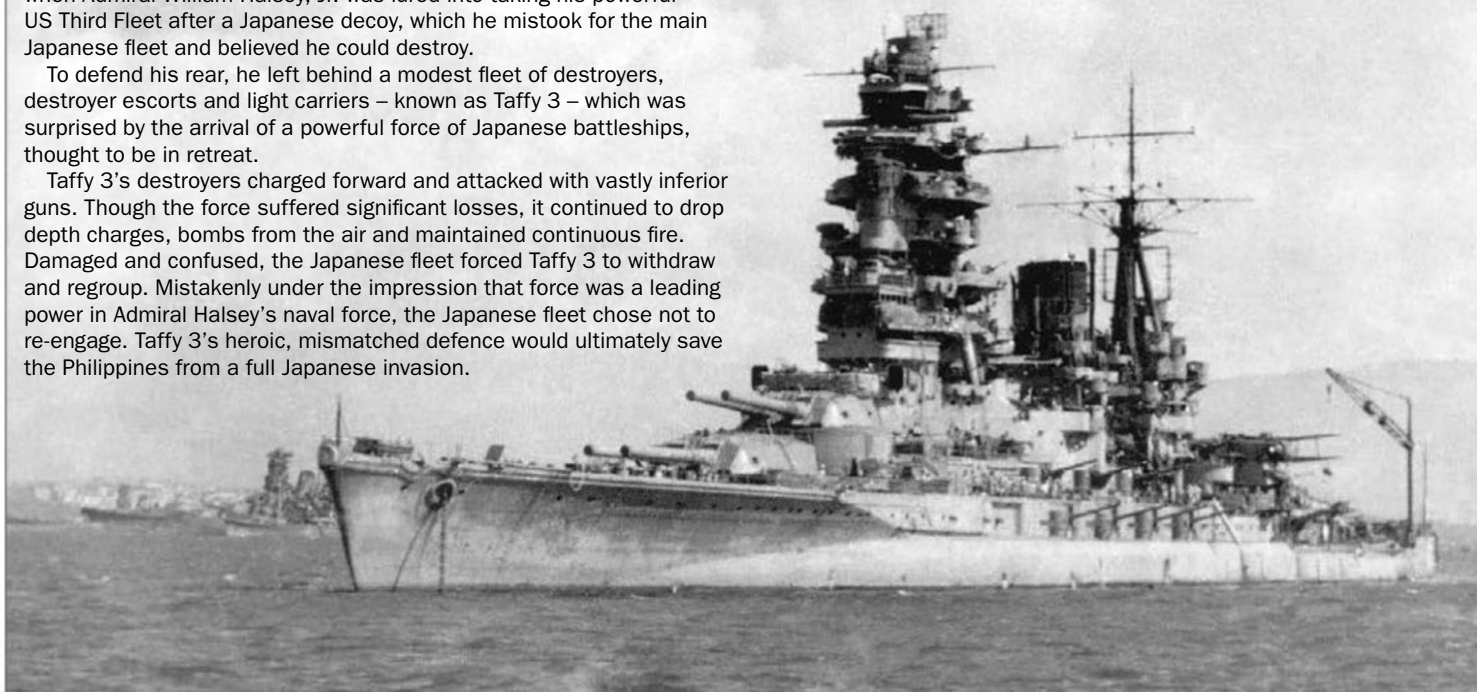
25 OCTOBER, 1944

NUMBERS: JAPAN: 4 BATTLESHIPS, 6 HEAVY CRUISERS, 2 LIGHT CRUISERS, 11 DESTROYERS, KAMIKAZE US: 6 ESCORT CARRIERS, 3 DESTROYERS, 4 DESTROYER ESCORTS, AIRCRAFT

Known as one of naval history's greatest mismatches, the battle began when Admiral William Halsey, Jr. was lured into taking his powerful US Third Fleet after a Japanese decoy, which he mistook for the main Japanese fleet and believed he could destroy.

To defend his rear, he left behind a modest fleet of destroyers, destroyer escorts and light carriers – known as Taffy 3 – which was surprised by the arrival of a powerful force of Japanese battleships, thought to be in retreat.

Taffy 3's destroyers charged forward and attacked with vastly inferior guns. Though the force suffered significant losses, it continued to drop depth charges, bombs from the air and maintained continuous fire. Damaged and confused, the Japanese fleet forced Taffy 3 to withdraw and regroup. Mistakenly under the impression that force was a leading power in Admiral Halsey's naval force, the Japanese fleet chose not to re-engage. Taffy 3's heroic, mismatched defence would ultimately save the Philippines from a full Japanese invasion.



BRITISH PARAS HOLD ARNHEM BRIDGE

THE BATTLE OF ARNHEM

17-26 SEPTEMBER, 1944

SURROUNDED AND WITH LITTLE FIREPOWER, A SMALL BAND OF PARATROOPERS OVERCOME THE ODDS FOR FOUR BLOODY DAYS

After charging through France and Belgium in the summer, there was one last natural barrier standing between the Allied troops and Germany – the River Rhine. From the Allies' need to conquer this barrier came Operation Market Garden.

Masterminded by General Bernard Montgomery, commander of the British forces in Europe, Market Garden was one of the boldest plans of the Second World War. 30,000 British and American airborne troops were to be flown behind enemy lines to capture the eight bridges across a network of canals and rivers on the border on Holland and Germany. At the same time, British tanks and infantry planned to push up a narrow road leading from the Allied front line to these key bridges. They would relieve the airborne troops, then cross the bridges.

The troops set to make the drop were from the First Allied Airborne Army, which included one British and two American divisions. They would drop into the towns of Eindhoven, Nijmegen and Arnhem to take the bridges, which would give them an advantage.

But there were problems: unknown to Allied intelligence, two SS Panzer divisions were stationed around Arnhem, with many tanks and vehicles; also, the Allies had too few aircraft to deliver all their troops at once. They would be dropped over three days, at a site seven miles away to avoid anti-aircraft guns, therefore losing the element of surprise. Though the drop was successful, the journey to Arnhem was much more problematic.

As Allied troops collected up their equipment and headed towards Arnhem, Wehrmacht forces were quick to regroup and organise their efforts against the airborne troops. The German infantry was determined, and made a defensive perimeter near-impenetrable for

many of the Allied battalions. Adding to the problems, the Allies quickly discovered their radios weren't working, which broke down all communication and the ability to co-ordinate the attack. Also the XXX Corps, which had been following the Allied aircraft from the ground, had made very slow progress and not reached any of the bridges to offer support.

Despite German resistance, some American forces reached their designated bridges only to find they'd already been destroyed. One British battalion – just over 700 men led by Lieutenant Colonel John Frost – made it through to Arnhem bridge, and by evening captured the northern end. However, their numbers were relatively small and they were only lightly armed. Soon they found they were cut off from the rest of their division and were surrounded by the 9th SS Panzer division.

As American forces spent the next few days trying to reach their British allies at Arnhem bridge, they suffered huge losses. Despite this, British paratroopers held their position at the north end of the bridge for four days, short on basic supplies, massively outnumbered and still awaiting delayed reinforcements. The paratroopers surprised German forces with their continued counterattacks and despite the merciless artillery fire they refused to give up their position.



Aerial view of the bridge over the Neder Rijn, Arnhem – British troops and destroyed German armoured vehicles are visible at the north end of the bridge

By the time the Americans took the Nijmegen bridge, it was too late for the paratroopers – the enemy had moved tanks into the town, demolishing the houses in which the British were fighting. With limited anti-tank weapons, no food and most crucially little ammunition, it was only a matter of time before the British would capitulate.

On the fourth day, the paratroopers were overpowered. Those who weren't wounded or captured had little choice but to withdraw, retreating to the village of Oosterbeek, where a small pocket of British troops were holding out. The Allied troops had overstretched their efforts, earning the event the moniker of "a bridge too far".

The Aftermath

THE BRITISH PARATROOPERS' EFFORTS ARE A REMARKABLE EVENT IN WHAT WAS AN OVERALL DISASTER FOR THE ALLIES

Of the 10,000 men who landed at Arnhem, 1,400 would be killed and over 6,000 captured. Just a couple of thousand paratroopers would escape, safely crossing to the south bank of the Rhine in small rubber boats. Though a valiant effort from the airborne troops, it was a dark time for the British army and would halt the progress of the Allied campaign. General Montgomery had intended to end the war by December 1944 on the back of Market Garden, but instead it would be four months before the Allies successfully crossed the Rhine, with the war raging on until September 1945.

Four British paratroopers moving through a destroyed house in Oosterbeek where they retreated after being driven out of Arnhem

AGAINST THE ODDS

Number of defenders: 745

Number of attackers: 8,000 approx

Attacking advantage: Reinforced defensive lines, superior firepower and vehicles, much greater numbers.

Defending disadvantage: Cut off from other divisions, poor communication equipment, insufficient supplies and a poor supply of ammunition.



Below: An anti-tank gun of the No. 26 Anti-Tank Platoon, 1st Border Regiment, 1st Airborne Division at Arnhem, September 20, 1944



THE BATTLE OF WIZNA

7-10 SEPTEMBER 1939

In a phenomenal show of resistance to the Nazi invasion, 720 recent Polish conscripts battled to defend the village of Wizna. It had been fortified before the war, though was put to the test when 42,200 Germans rolled in with tanks and artillery. Though outnumbered by almost 60 to 1, the Poles held Wizna for three days.

PRVT. BAKER WINS THE MEDAL OF HONOUR

THE BATTLE OF SAIPAN
15 JUNE-9 JULY 1944

NUMBERS: JAPANESE: 5,000 (APPROX) USA: ONE

The Battle of Saipan was fought between thousands for a whole month, as the USA and Japan battled to occupy islands in the Pacific. However, it's the heroic actions of one 28-year-old private, Thomas Baker, that are remembered as one of the US Army's greatest last stands.

On expedition to retake the island of Mariana, Pvt. Baker's company was attacked by 5,000 Japanese troops. Though overpowered, Baker held the line – taking out many soldiers single-handedly, breaking his own rifle by using it as a club and at one point charging 100 yards ahead of his unit with a bazooka to destroy a Japanese emplacement. In the closing moments of the Japanese assault, as the company was surrounded, Baker became seriously wounded.

Though he had been dragged from the battle, Baker insisted on being propped against a tree in a sitting position, where he was left with his service pistol and eight rounds of ammunition.

This is where his body was found some time later, in the same position, but with the gun empty and eight dead Japanese soldiers around him. He was posthumously promoted to Sergeant and awarded the prestigious Medal of Honor.



REMEMBER THE ALAMO

TEXAS DEFENDS
THE ALAMO MISSION

23 FEB-6 MAR, 1836

NUMBERS: MEXICO: 2,000 (APPROX) TEXAS: 189 (APPROX)

In the final days of the Texas Revolution – a territorial conflict between the Mexican government and Texas colonists – poorly armed Texan rebels defended the old Spanish mission from one of Mexico's finest generals, Antonio Lopez de Santa Anna. Driven out in the months before, the Mexican troops had returned to reclaim Texas, but the hopelessly outnumbered Texans, including frontiersman David Crockett and James Bowie, fought back, beginning a siege that lasted 13 days.

On the final day, Santa Anna launched a surprise pre-dawn attack – a full assault on the mission that forced the Texan defenders to retreat as they were overpowered by the Mexican cavalry. The last of the Texans to die were 11 men manning a cannon in the chapel, bayoneted to death as Mexican soldiers broke through the doors.

It was a hugely significant event in Texan history, as the Republic of Texas was declared an independent nation during the time of the siege, leading to its eventual annexation into the United States of America. The Battle of the Alamo is symbolic of unshakable Texan pride in the face of adversity.



THE 101ST AIRBORNE HOLDS BASTOGNE

20-27 DECEMBER, 1944

JUST DAYS AFTER THE EXHAUSTED AND ILL-EQUIPPED 101ST AIRBORNE DIVISION ARRIVED IN BASTOGNE, IT BECAME SURROUNDED – FIGHTING TO DEFEND THE TOWN'S ALL-IMPORTANT CROSSROADS

Following the Normandy Invasion, the German Wehrmacht had lost the crucial harbour at Antwerp – to re-take it, Hitler initiated the Battle of the Bulge, part of which included his forces seizing control of the Belgian town of Bastogne. Numerous important roads passed through the town, making it of strategic importance to both sides.

The 101st Airborne arrived in Bastogne on 18 December and two days later, German forces mounted a surprise attack through the Ardennes mountains; they surrounded the town and on 20 December commenced

artillery fire. The following day, all roadways into Bastogne were cut off.

The enemy also dropped bombs on the town, but the 101st stood fast and refused to have its lines penetrated. On 22 December, German commander Lt. Gen. Heinrich Freiherr von Luttwitz sent in two surrendering soldiers with a note demanding the Americans' surrender, to which Brig. Gen. Anthony McAuliffe famously exclaimed: "Nuts!"

As the days passed, the weather cleared and supplies could be airlifted to the US troops. Mistakes by the German attackers also helped the American survival – troops were moved towards the town of Meuse, weakening the circle and helping the 101st hold the crossroads. After seven days of fighting, parts of General Patton's Third Army arrived, breaking the German encirclement and ending the siege.

The successfully defended siege proved a defining victory for the US and turned the tide in not just the Battle of the Bulge, but the whole war. From here, Allied forces would not only hold their position, but advance forward, marking the beginning of the end for Nazi Germany.

German soldiers who attempted to storm the 101st Airborne in Bastogne lie dead on the ground after being cut down by machine gun fire





AGAINST THE ODDS

Number of defenders: 12,000 approx

Number of attackers: 54,000 approx

Attacking advantage: Much larger numbers encircling the 101st Airborne, with superior equipment and access to supplies.

Defending disadvantage: Lack of sufficient winter clothing, no supplies due to weather, exhaustion from prior combat in Holland.



Soldiers of the US 101st Division march out of Bastogne in the snow during or just after the siege



THE SIEGE OF SZIGETVÁR

5 AUG-7 SEPT, 1566

As Ottoman Emperor Suleiman the Magnificent pushed into Hungary, he met Count Nikola Zrinski, whose 2,500 men held an army of 100,000 off the Szigetvár fortress for a month. Before his death, Zrinski booby-trapped the fortress with explosives, killing thousands of Ottoman soldiers as they eventually stormed the building.

BATTLE OF SHIROYAMA

24 SEPTEMBER, 1877

In the final battle of the Satsuma Rebellion – in which samurai revolted against the new imperialist government – Saigo Takamori and his 300 samurai were surrounded by 30,000 armed imperial troops. The samurai fought with their bows and katanas, but eventually succumbed to an artillery bombardment. The samurai all perished, ending the rebellion.



AGAINST THE ODDS

Number of defenders: 6,000

Number of attackers: 100,000

Attacking advantage: Huge numbers of troops, as well as the support of Greek cities that had switched allegiance prior to the battle.

Defending disadvantage: Inferior numbers, as well as attacks from both the front and to the rear.



Painting of King Leonidas making his legendary last stand at Thermopylae, by Jacques-Louis-David

KING LEONIDAS HOLDS BACK THE PERSIAN EMPIRE

THE BATTLE OF THERMOPYLAE 480BCE

AS THE GREEKS WENT TO WAR WITH THE INVADING PERSIANS, SPARTAN KING LEONIDAS LED A SMALL ARMY TO NEAR VICTORY

The Persian king Xerxes' invasion of Greece in 480BCE forced the cities to unite in battle. With Spartan king Leonidas leading the charge, they chose to defend a narrow pass between the mountains and the sea, called Thermopylae.

The Persians arrived at the pass, but several days went by without battle. When a scout was sent to find out the Greek position, he returned to say the Spartans were combing their hair and exercising. King Xerxes was warned – they were preparing for war. Finally, the Persians launched the attack.

The Greek army defended the pass from behind a wall blocking the path, from behind which it successfully fended off wave after wave of attacking Persians. In the narrow space, the Persian horde couldn't utilise its greater numbers and the Greeks' longer spears proved highly efficient. Occasionally the Greeks feigned retreat, only to

turn and overpower the Persians tricked into pursuit.

After two days, a Greek traitor revealed a pathway leading behind Leonidas' men, enabling the Persians to execute a sneak attack. The Spartan warriors among the Greek forces refused to flee despite this disadvantage, and chose to fight on. Eventually, they withdrew to a nearby hillock and battled with what strength they had left. Before long the sheer number of Persian soldiers became too great and volleys of arrows overwhelmed the Spartans.

The Persian army went on to march into central Greece, causing havoc and destruction and conquering most of the country. However, Leonidas and his men became martyrs, boosting the Greeks' morale in their efforts to repel Xerxes' invading forces – eventually expelling them the next year.

SOVIET RESISTANCE

THE DEFENSE OF BREST FORTRESS

22-29 JUNE, 1941

NUMBERS: SOVIET: 9,000 (APPROX) AXIS: 20,000 (APPROX)

In one of the first battles of the pivotal Operation Barbarossa – the attempted Nazi invasion of the USSR – Soviet troops and civilians made one of the Second World War's most defining and courageous last stands.

Launching a surprise attack of Brest Fortress, in Belarus on the Russian-Polish border, Axis forces initiated their first major battle with Soviet forces. In addition to the 9,000 Soviet soldiers, border guards and NKVD operatives inside the fortress, there were 300 family members of the soldiers – who helped by reloading guns, providing food and even fighting.

As the battle raged for seven days, the Soviets developed defensive encampments in the fortress that held back the Germans, who suffered unexpectedly heavy casualties – over 1,000 dead or wounded.

The fortress finally fell on 29 June. The Soviet forces lost 2,000 men and nearly 7,000 captured, but the fortress remained a symbol of Soviet strength. The battle itself, meanwhile, was a precursor to the Nazis' struggle in trying to take the USSR.





A SIKH REGIMENT STANDS FOR QUEEN AND COUNTRY

THE BATTLE OF SARAGARHI

12 SEPTEMBER, 1897

NUMBERS: PASHTUNS: 10,000 SIKHS: 21

The British struggled to hold India, and it often proved too big for British government to control. In 1897 it faced one of its biggest challenges yet – an attack at the North-West Frontier Province, part of British India and today part of Pakistan. The area was occupied by the tribal Pashtuns, who had rejected British rule.

In September 1897, 10,000 Pashtuns launch an attack, charging the signalling post in the village of Saragarhi to cut off communication between two British forts.

The post was defended by a small band of Sikhs, just 21 individuals from the 36th Sikh Regiment, who all chose to fight to the death, using up all of their ammunition before taking on the attackers in hand-to-hand combat. They killed nearly 600 Pashtuns before eventually being overpowered.

The Pashtun rising was crushed two days later under heavy artillery fire. The 36th Sikh Regiment continues to commemorate the battle every year on 12 September.

FIGHTING IRISH KEEP THE PEACE

THE SIEGE OF JADOTVILLE

SEPTEMBER, 1961

NUMBERS: CONGOLESE: 5,000 IRISH: 150

On a United Nations peacekeeping mission during the Katanga conflict in the Congo, a company of Irish support troops was deployed to the city of Jadotville, arriving without support staff or adequate supplies.

On a Sunday morning, while the mostly Catholic troops were attending mass, a band of mercenaries and local tribesmen loyal to Katangese Prime Minister Moïse Tshombe attacked the UN troops' outpost.



The attackers came with aircraft and mortar support, while the Irish had light anti-personnel weapons and antiquated Vickers machine guns. The besieged troops famously reported: "We will hold out until our last bullet is spent. Could do with some whiskey."

The Katangese attacked in waves of 600, but the Irish response was effective and precise, concentrating its fire on Katangese machine gun and mortar posts.

Under the bombardment, the Irish held out for six days, killing 300 of the attackers and wounding up to 1,000 more, before being forced to surrender when they exhausted their ammunition. It was the only time since the creation of the Irish state that its troops had been in combat with another nation.

THE BATTLE OF THE IMJIN RIVER

22-25 APRIL, 1951

A year into the Korean War, 10,000 Chinese troops attacked a small UN defensive line. The isolated Gloucestershire Regiment – just 650 men, immortalised as "the Glorious Glosters" – took the worst of it. They withdrew and reformed on a nearby hill, where they stood and fought for 24 hours, until being ordered to retreat. Of the 650, only 40 escaped.

A squad of the 3rd Ranger Co., 3rd Infantry Division, moves out of assembly area to probe Chinese Communist territory north of the Imjin River, Korea. 17 April 1951



THE OLD GUARD AT WATERLOO

18 JUNE, 1815

As the British pushed back Napoleon's Imperial Guards, charging forward with bayonets fixed, it looked for sure that the French were defeated. All that remained was the Old Guard, which had been waiting in reserve. They stood their ground, refusing to surrender to the British, until relentless attacks eventually left none alive.



The Battle of Rorke's Drift as painted by Alphonse de Neuville in 1880. The public's image of the battle would be shaped by the film Zulu (1964)



139 SOLDIERS VS THOUSANDS OF ZULU WARRIORS

BATTLE OF RORKE'S DRIFT

22-23 JANUARY, 1879

A SMALL BRITISH POST IS CHARGED BY THOUSANDS OF ZULU WARRIORS – LEADING TO ONE OF THE BRITISH MILITARY'S MOST CELEBRATED VICTORIES

Intent on establishing a colony, British forces invaded Zululand and sought out the army of Zulu king Cetshwayo. Underestimating the Zulus' fighting abilities, the British divided and suffered a surprise attack at Isandlwana, losing almost 1,700 men. Then the Zulu Army proceeded across the Buffalo River to Rorke's Drift, where the British had already established a depot and hospital.

Using bags of maize, canned food, and biscuit boxes as makeshift barricades, the British soldiers at Rorke's Drift – which famously included Colonel John Chard, Major Gonville Bromhead, and Corporal William Allen – held back the Zulus with their gunfire. Any enemy warrior that managed to climb the barricades was repelled with bayonets. British soldiers too wounded to fight – including

those who had made it back from Isandlwana – helped reload the guns and distribute ammunition. Some Zulus eventually broke into the hospital and speared the patients within, though they were eventually fought off and the surviving patients rescued.

After 12 hours of fighting the Zulus eventually retreated, leaving behind 400 dead. But the British soldiers were by this point low on ammunition – if the Zulus were to mount another attack, it was likely they would break through.

The last stand was held up as a definitive act of British heroism and a welcome means of boosting public morale in the face of the Isandlwana massacre. The survivors of Rorke's Drift were awarded 11 Victoria Crosses and five Distinguished Conduct Medal. Zululand was declared a British territory the following year. The battle became a popular story in British military history and a powerful example of how a courageous last stand on the battlefield can overshadow other losses.

British survivors standing on the battlefield at Rorke's Drift



AGAINST THE ODDS

Number of defenders: 139

Number of attackers: 4,000

Attacking advantage: Superior numbers, high ground, knowledge of the terrain.

Defending disadvantage: Defenders weren't the soldiering elite, mostly made up from cooks, engineers, and supply clerks.

ONE VIKING HOLDS BACK THE KING'S ARMY

THE BATTLE OF STAMFORD BRIDGE 25 SEPTEMBER, 1066

THREE WEEKS BEFORE THE BATTLE OF HASTINGS, KING HAROLD DEFEATED ANOTHER INVASION – THOUGH HE WAS NEARLY HALTED BY JUST ONE VIKING WARRIOR

Arbo: Battle of Stamford Bridge by Peter Nicolai Arbo (1870). Notice the arrow to the Viking King Hardrada's throat in the centre of the battle

The Viking King Harald Hardrada, challenger to the English throne, had landed in Yorkshire accompanied by the English King Harold's brother, Earl Tostig. The Vikings swiftly defeated Morcar, Earl of Northumberland and Edwin, Earl of Mercia in a bloody battle, before receiving the surrender of York.

Of course the other infamous claimant to the throne, William of Normandy, maintained

Edward the Confessor had promised him the English throne before his death. Aware of the Viking invasion, William decided to delay his own invasion until Harold was at his most vulnerable, dealing with Hardrada in the North.

King Harold was in a difficult position – he anticipated the arrival of William in the south any day. Would he travel north to deal with the Vikings, or stay where he was to await William's attack? Harold chose to march north, hoping to defeat Hardrada and the Vikings before returning south in time to meet William.

Hardrada travelled to Stamford Bridge, where he had agreed to exchange hostages. Expecting Harold to remain in the south under the threat of Norman invasion, the Viking king left a third of his troops and armour at his base camp at Riccall on the River Ouse.

Harold's army, most likely mounted troops, reached York on the morning of September 25. Reinforced by what remained of Morcar's and Edwin's forces, he marched to Stamford Bridge, taking Hardrada completely by surprise.

Harold's army charged towards the Vikings, devastating them immediately. Those who weren't killed immediately struggled to pull their armour on and make a defensive line. They managed to form a circle to hold back the English, but the ambush had already laid waste to many of their number – deciding the outcome of the bloody battle long before it was finished.

The advance of Harold's army was delayed by the need to pass through the narrow chokepoint of the bridge. Blocking the way was one lone Viking, an anonymous warrior who stood wielding a great axe. Harold's troops tried to cross, but the lone Viking cut down every one who challenged him. He held this position for

AGAINST THE ODDS

Number of defenders: An army of 6,000 approx – whittled down to just one

Number of attackers: Between 10,000-12,000 men
Attacking advantage: Harold's army took the Viking invaders by surprise with greater numbers, mostly mounted on horseback.

Defending disadvantage: The Vikings had removed protective clothing in the heat and are thought to have divided, thus weakening their ranks.

over an hour, single-handedly killing up to 40 English soldiers.

Unable to defeat him face-to-face, Harold's men had to come up with an alternative means of chopping down the warrior. One of the English soldiers floated a barrel in the river below, paddling under the bridge. From this position he thrust a spear through the wooden slats of the bridge, stabbing the Viking in the groin and mortally wounding him.

Finally, the English soldiers could advance. They found the Norse army formed into a shield wall, leading to brutal hand-to-hand combat that lasted for hours. However, it was already too late for the Vikings: Harald Hardrada was killed with an arrow to the throat and the treacherous Earl Tostig slain on the battlefield. It was to be a victory for the English.

WAKE ISLAND

8-23 DECEMBER, 1941

The day after Pearl Harbor, the Pacific outpost of Wake Island was attacked by around 30 Japanese aircraft. But a small combined force of US marines, sailors and civilians fended off the Japanese's first landing attempt, sinking two destroyers and damaging a cruiser. The Japanese succeeded in taking the island on 23 December, but lost up to 1,000 men.



The Aftermath

DESPITE THE LONE VIKING'S EFFORTS, THE BATTLE WAS A DECISIVE VICTORY FOR HAROLD

The lone Viking's last stand was seemingly Harold's biggest obstacle in the battle. Overall the victory proved Harold to be an able commander, while his troops – particularly the housecarls – proved themselves highly skilled. The victory at Stamford Bridge will forever be linked to Harold's defeat at the Battle of Hastings, which took place less than three weeks later. Had Harold not been forced to leave William's landing in the south unopposed, later facing him with an army that had suffered losses and was stricken by fatigue, then the outcome could have been very different.

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THE SPANISH CIVIL WAR

WORDS FRANCES WHITE

The Spanish Civil War became such an international affair that it was dubbed the ‘dress rehearsal for WWII’. However, it was born out of problems stretching into the 19th Century...

At one point Spain had been the main European power, but that golden past crumbled into dust into the 18th and 19th Centuries. There were few colonies left of its once mighty empire, and the land that remained was fractured and divided. By the 20th Century, the vast extremes in wealth and poverty meant the country was almost split in two. Repeated uprisings had forced kings and queens from their thrones, but the people were yet to find a government able to unite a society so splintered. What was once the world’s most powerful nation had been transformed into a land struggling to maintain control of its own people and its own fate.

The global economic depression in the aftermath of World War I (in which Spain remained neutral) was all the motivation the Spanish people needed to take drastic measures. King Alfonso XIII had proved himself unworthy of ruling the land he had inherited, putting a stop to any liberal reforms and executing those who dared rebel against him. There was little support for a monarchy led by this man, but there was someone the public could support – powerful, charismatic and full of bright promises for Spain’s future: Captain General Miguel Primo de Rivera, who led a military coup in 1923. Promising to rule for only 90 days, he vowed to push through reforms and restore Spain into the proud nation of its past.

The Spanish people welcomed de Rivera, but their hopes for this shining beacon of change and prosperity would quickly turn to disappointment. The first promise he broke was the vow to rule for only 90 days, the next was his pledge for change and finally he even shattered his image as a saviour to the struggling Spanish people. He was, as they had seen so often before, just another man hungry for power. The tide turned against de Rivera and he was forced to resign in the face of mass unpopularity, after seven long years of directionless dictatorship. Spain was right back where it had been before, except this time the people’s hunger for change was insatiable.

The people decide

There was only one way to keep the baying crowd from knocking down the doors of the royal palace – they needed to choose their own leader. In 1931, for the first time in nearly 60 years, free elections were held. Would the people return to the Spain of the past, ruled by a singular king, or take fate into their hands and elect a government? The result was overwhelming: the Spanish people wanted to rule themselves. They wanted a republic. The response was so definitive that for his own safety Alfonso XIII left the country and went into exile. Spain’s fate was well and truly in the hands of its people.

A general election was held later that year and the large number of republicans and socialists voted into parliament showed support from all branches of society for the first time in Spain’s recent history. The revolutionary leader Niceto Alcalá Zamora became prime minister, and his government was full of political firebrands ready to shake Spain up. It was the extreme radicalism of one of these figures, Manuel Azaña, that forced Zamora from his position of power just four months after the election was held. Azaña was determined to lead Spain through rapid change, and that meant taking drastic measures. The Catholic Church had previously played a central role in almost every aspect for Spanish life, but Azaña believed this was draining the land and forcing it backwards. He pushed through reforms that brutally cut the Catholic Church away from the state. As religious buildings and churches were burned to the ground, he simply commented: “All the convents of Madrid are not worth the life of a single republican.”

The Catholics were furious. The change that Spain was undergoing under the new coalition government was the last thing they had expected, and it needed to be stopped. But they weren’t the only ones disillusioned with the radical new cabinet. The military too had felt the result of brutal reforms and cutbacks to their numbers. Their response

Civilian militia take up arms at the Siege of the Alcázar in the opening days of the Spanish Civil War.





KEY FIGURES



MIGUEL PRIMO DE RIVERA

De Rivera served as prime minister of Spain from 1923 to 1930, with the vision to restore the nation by ruling alone in a dictatorship without corrupt politicians. His weak leadership and unpopularity only heightened tensions in the country and discredited the monarchy that supported him.



KING ALFONSO XIII

Alfonso inherited the throne at birth due to the death of his father before he was born. When economic instability tore across the country in 1930 he resigned and supported the dictator de Rivera. Because of his support he soon became unpopular and fled when the Second Republic formed.



MANUEL AZAÑA

Manuel Azaña served as the prime minister of the Second Spanish Republic in 1931-33 and then was re-elected in 1936. He pushed through extreme reforms that reduced the size of the army and severely limited the power of the Catholic Church, causing outrage among moderates and religious groups.



JOSÉ SANJURJO

A general in the Spanish army, Sanjurjo was loyal to the monarchy and clashed with Azaña over military reforms. When he was demoted, he plotted a rebellion known as the Sanjurjada. He later joined the cause to overthrow the Popular Front, leading to the Nationalist uprising that started the Civil War.



EMILIO MOLA

Serving in the military during Spain's colonial war in Morocco, Mola was made director general of security under Alfonso XIII. When the left-wing Popular Front was elected in 1936 he became the chief plotter, known as 'the director', in the plans for an uprising. He devised the military coup of July along with Sanjurjo, which thrust the country into civil war.



NICETO ALCALÁ-ZAMORA

Zamora was head of the revolutionary committee and then served as the first prime minister of the Spanish Republic. He resigned shortly after due to the anti-clerical reforms. Later that year he was elected president. His efforts to moderate the far right and radical left caused him to be attacked by almost all the parties and forced into exile.

was a military uprising led by General José Sanjurjo. A monarchist at heart, the seasoned warrior's rebellion gained speed in Seville, but once it reached Madrid it was trodden into the mud. Sanjurjo was sentenced to death, but the message was clear: the government faced powerful opposition from within its armed forces and the religious establishment.

Darkness descends

The 1933 elections demonstrated the scale of the problems Spain faced, with the right-wing Catholic CEDA party winning 115 seats compared with the socialists' 58. With its newfound power, the CEDA worked to eliminate the years of reforms put in place by previous government, and saved its revolutionary hero, General Sanjurjo from his death sentence. Although this pleased Catholic supporters, it only served to widen the chasm between the political parties. On the left, socialists became even more determined to return to government, secretly training socialist youth in plans for a armed insurrection.

It didn't take long for Spain to burst at the seams. The political conflict poured into the streets with widespread violence, and an anarchist protest was hastily crushed in the winter of 1933 as tanks rolled down the street. But the socialists didn't have any plans to stop – in an effort to force another election, a revolutionary strike was held in Asturias in October 1934. The government response was brutal, with mass executions of men, women and children. Approximately 1,000 workers were killed and 250 government soldiers left dead. Those on the left would later call this era of right-wing power, “the two black years.”

With the national elections approaching, Manuel Azaña became determined to assemble a party strong enough to beat the right wing and pull the country out of the black pit it had fallen into since its rule. Comprised of the Socialist Party, the Communist Party, Esquerra Party and the Republican Union Party, he formed the Popular Front. Meanwhile those who supported the right wing formed the National Front, comprised of CEDA and Carlists. Members of the fascist Falange also

“SPAIN WAS RIGHT BACK WHERE IT HAD BEEN BEFORE, EXCEPT THIS TIME THE HUNGER FOR CHANGE WAS INSATIABLE”



A host of anti-republican propaganda urged the people to rise against the government

1921-23

RUMBLINGS OF DISCONTENT

Strikes among industrial and agricultural workers break out across the country as Spain suffers economic depression in the aftermath of World War I, the government struggles to deal with the unrest.

1923

DE RIVERA COMES TO POWER

Miguel Primo de Rivera takes over government in a military coup, he promises to only be in power for 90 days and reform Spain and eliminate corruption, but his regime soon turns out to be an inept dictatorship.

1930

DE RIVERA RESIGNS

After a stream of disastrous decisions, rocketing inflation and mass unpopularity among the population, de Rivera loses the support of the army and the king and is forced to resign from the Spanish government.

1931

THE SECOND SPANISH REPUBLIC

Elections reveal there is no support for the monarchy and King Alfonso XIII flees the country. The Second Spanish Republic, headed by centre-left politician Niceto Alcalá-Zamora, is declared.

1931

THE CHURCH SUFFERS

The new republican government brings in a number of anti-clerical reforms such as allowing divorce and civil marriage and separating the church and state in an effort to limit the church's power.

1932

MILITARY REVOLT

Brutal general and monarchist José Sanjurjo attempts to stage a military revolt in response to thousands of officers being forced to retire on half pay. The uprising is defeated but unrest still remains.

Republican troops lead an assault on the nationalist position in Madrid in 1936



“THE WORLD’S MOST POWERFUL NATION HAD BEEN TRANSFORMED INTO A COUNTRY STRUGGLING TO MAINTAIN CONTROL OF ITS OWN PEOPLE AND ITS OWN FATE”

supported the National Front. With the equally strong parties squaring off against one another, national elections were held in 1936.

The result yet again reflected the fractured nature of the country. It was incredibly close, with the National Front obtaining 33.2 per cent and the Popular Front gaining 34.3 per cent of the vote. Power switched hands once more, and yet again the opposing party tirelessly erased the work of the previous government. Unconcerned with angering the National Front, the Popular Front released left-wing political prisoners and transferred any powerful right-wing military figures outside of Spain. However, the most damning move was the removal of the moderate Zamora as president. Zamora was described by the Bolshevik revolutionary Leon Trotsky as Spain’s ‘stable pole’, and his ousting convinced conservatives that they would not

achieve their aims through solely political measures. This only worked to further polarise the two parties, and it seemed any hope for compromise was well and truly eliminated.

Politics takes to the streets

Although the fascist Falange grew steadily more powerful with disillusioned supporters of CEDA filling its ranks, the army had plans of its own. To the men who had once sworn their oaths of loyalty to the Spanish king, the influence wielded by socialists and anarchists was alarming. CEDA appealed to Emilio Mola, a nobleman and former general, and together they decided that the government had to be overthrown by force to prevent the complete destruction of the country.

Lieutenant José Castillo of the Socialist Party was murdered by members of the Falange on

2 July 1936. The retaliation was quick and brutal – police arrested the monarchist José Calvo Sotelo and he was shot without trial. The killing of this prominent conservative was the catalyst the military needed to start its planned uprising. Spanish Morocco was the first to fall to the rebels and soon the revolution spread to mainland Spain. The nationalists took Seville and heavy conservative and Catholic areas were quick to join them. However, the government had acted swiftly too, managing to secure most of the eastern coast and central areas in the meantime.

By the time the coup had ended there was a nationalist-controlled area occupying 11 million of Spain’s 25 million residents, as well as 60,000 men of the army. Not only was the population split between the two sides, but the tanks, rifles, machine guns and warships were scattered between the forces. With both groups armed and eager to fight, all the pieces were in place for a violent and explosive civil war. It would involve not only Spain, but some of the biggest players in a world, who would watch with interest the 20th Century’s first major clash between the far right and the radical left.

1933

THE BIRTH OF NEW PARTIES

The radical anti-clerical measures leads to the creation of the Catholic CEDA party, while the fascist Falange party is also formed by José Antonio Primo de Rivera, the son of Miguel Primo de Rivera.

1933

THE CHURCH BITES BACK

The right-wing CEDA party overwhelmingly wins the election (115 seats) and immediately sets about reversing the reforms made against the power of the Catholic Church by the previous government.

1934

REBELS ARE SILENCED

A miners strike in northern Spain is crushed by the government, 1,500-3,000 strikers are killed and 30,000-40,000 arrested. Left-wing newspapers are shut down and local councils are suspended.

1936

BACK TO THE LEFT

An election is won narrowly by the left-wing Popular Front (34.3 against 33.2 per cent of the National Front). Manuel Azaña becomes president and works to reinstate the reforms of the 1931 government.

1936

THE RISE OF THE FASCISTS

The far-right Falange party receives a huge growth in numbers as disillusioned CEDA members join its ranks. Disorder spreads through the country and violence pours onto the Spanish streets.

1936

A STRING OF ASSASSINATIONS

Calvo Sotelo, a monarchist politician, is assassinated by the republicans in revenge for one of their men being murdered by the Falange. This gives the perfect excuse for the military to begin the coup that starts the Civil War.

Alamy



Great Battles

CAMBRAI

When the British Army deployed tanks to change the pace of the First World War, it changed the face of it instead

WORDS JONATHAN HATFULL

By 1917 the British Army's notions of war had changed entirely. Any romantic ideals of the glory of combat and the open battlefield had been trampled and drowned in the blood-drenched, rain-slicked mud and barbed wire of the trenches of the Somme. Men fought and died for yards that felt like inches. Three years of almost imperceptible movement in the fields of France had pulled the wool from British commanders' eyes.

With change so desperately needed, it's not surprising that the plan of attack at Cambrai was the product of ideas from three groups. British preliminary bombardment meant German forces were always alerted to the fact an attack was imminent, enabling a tactical retreat before a counter-attack. In August 1917, artillery commander Brigadier General Henry Hugh Tudor proposed 'silent registration' of guns, bringing the artillery to the battlefield



CAMBRAI, FRANCE 20 NOVEMBER – 7 DECEMBER 1917

WHO

The British Third Army, including Commonwealth and American troops, up against the German Second Army.

WHAT

The first major tank battle of the First World War, seeing hundreds of British modified Mark IV tanks deployed.

WHERE

Cambrai, France. Part of the Hindenburg Line, it was heavily defended and a key supply station for German forces.

WHY

Attempting to break the cycle of trench warfare, the assault was meant as a 48-hour lightning attack to gain key positions.

OUTCOME

An important lesson in the co-operation between tanks and infantry, but one that came at a huge cost with very few tactical gains.

British soldiers photographed during the battle. The photo's original caption reads: "Down in a shell crater, we fought like Kilkenny cats"



Right: Field Marshal Douglas Haig was the most senior British commander during WWI



Below: General Julian Byng, commander of the British Third Army, pictured in April 1917



without alerting the enemy. This process would be greatly assisted by the use of the No.106 instantaneous fuses, which meant that shells would detonate immediately on impact.

Meanwhile, the Tank Corps' Brigadier General Hugh Elles and Lieutenant Colonel John Fuller were desperate for a chance to show their machines' worth. Fuller was convinced they would be capable of conducting lightning raids to smash resistance and drive the British line forward. This dovetailed neatly with Tudor's plan, as General Julian Byng, head of the Third Army, recognised. Byng turned his eye to Cambrai, a quiet area used by the Germans as supply point. While it was very well defended with the deep trenches of the Hindenburg Line and barbed wire, an attack would certainly be unexpected despite the area's strategic value.

With six infantry divisions, five cavalry divisions and nine tank battalions, more than 1,000 guns were mustered for the attack. There would be a front of around 10,000 yards, covered by the III and IV Corps of the Third Army, which would be widened as the attack progressed. The III Corps had to break the Masières-Beaurevoir line, enabling the cavalry to circle around Cambrai and cut it off from

reinforcements before 48 hours had passed. Obviously, secrecy was paramount.

The Mark IV tanks were divided into "male" and "female" groups, with the former having four Lewis guns and two six-pounder Hotchkiss naval guns. The latter were each fitted with six Lewis guns. Without the naval guns, the "female" tanks were lighter, at 26 tons, while the "males" weighed 28. The crews also noticed that while the males had a door at the back, the female tanks had doors closer to the ground that were harder to get out of in an emergency. Eight men shared the single space with the engine, while the machine was only capable of reaching a speed of 3.7mph, and more typically around 1mph over bad terrain.

The tanks would lead, providing cover for the infantry as they crushed the barbed wire effortlessly under their tracks. As for navigating the trenches, each tank carried a fascine – a bundle of wood and branches, which would be deposited into the trench in order to fill it, so that the vehicle could drive over it. Meanwhile, a grapnel was fitted to some of the tanks to enable them to drag away the crumpled wire as they went, so that the path was clear for the advancing cavalry.

Several things needed to go very right in order for this so-called "clockwork" battle to work. Haig had fallen victim to overreaching in previous campaigns and he was determined that the Cambrai offensive have limited objectives and stick to its time frame. Minimising losses was crucial – even more so when he was forced to send two divisions to support the Italian front. Co-operation and communication between the divisions was also vital, as the battle's events would prove.

The battle rumbles to life

The attack began at 6.20am on 20 November as the artillery began shelling. With this stunning overture, the tanks advanced into the fog. The gentle incline made things very easy for the drivers, while the infantry marvelled at the ease with which the tanks rolled over the barbed wire as they followed them into battle, as did the men inside.

The initial advance seemed to be going impossibly well. The "clockwork battle" was living up to its name as the Germans were taken completely by surprise by this sudden, shocking attack. The British artillery kept up a devastating rate of fire, as much as possible given the two-rounds-per-minute rule to avoid overheating. The advance was also supported by the Royal Flying Corps, whose targets were on the ground rather than in the air. As the pilots braved machine-gun fire to drop their payloads, the weather worked against them. An Australian squadron pushed through

"WITH SIX INFANTRY DIVISIONS, FIVE CAVALRY DIVISIONS AND NINE TANK BATTALIONS, MORE THAN 1,000 GUNS WERE MUSTERED FOR THE ATTACK"

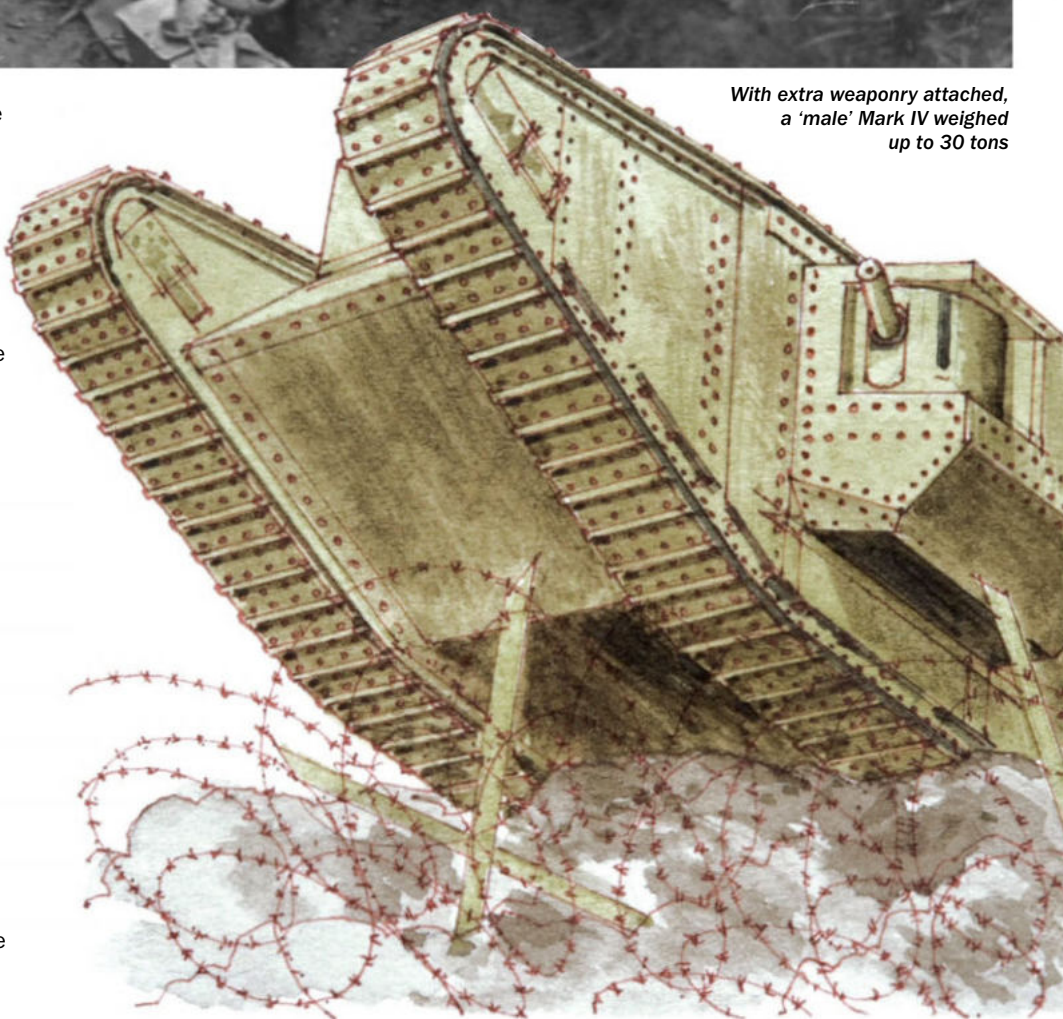


Men from the 11th Leicester Regiment in a captured enemy trench at Ribecourt

punishingly thick fog at Havrincourt, barely able to see one another, let alone their targets. If their planes went down, they had to fight their way back to their lines, as Lieutenant Harry Taylor was forced to do, picking up the weapon of a fallen man and setting out to find support.

This isn't to say there was no resistance. A myth sprung up as the days went on about a German gunner who held the enemy at bay entirely by himself. That myth does a disservice to the determination and skill of the men who suddenly found themselves on the back foot. Some of the troops stationed near Cambrai had come from the Russian front and had never seen a tank before. It's impossible to know what these soldiers thought as the metal leviathans rolled towards them, but they fell back on their training, resisting where possible before making a tactical retreat.

Before long, communication began to prove an issue. When the tanks worked in tandem with the infantry, such as through Havrincourt and Graincourt, things went very smoothly. Elsewhere, infantrymen were forced to bang on the door of the tanks to get their attention, while confusion over objectives led to groups of infantry being forced to take key positions without artillery support. However, sitting in these slow-moving targets had its own terrors. They drew the bulk of enemy fire and if the engine gave out, whether due to attack, water in the fuel tank, or even a fire, the tank became a sitting duck. Once engaged in combat, the inside of the tank would become incredibly



With extra weaponry attached, a 'male' Mark IV weighed up to 30 tons

hot as the guns began to fire and the sound of their doing so was deafening. Visibility was shockingly poor, while the fact that most tanks had to stop in order to turn meant that they were a popular target on the battlefield.

Nevertheless, the speed with which they were taking ground was intoxicating; each trench taken and each line of wire cleared was another step towards the objective and morale had rarely been higher. As the tanks moved further away from their lines of reinforcement, establishing a clear road and lines of communication back became crucial. However, the supply mules proved nearly useless in the tangle of mud and wire, while the narrow roads quickly became clogged with traffic back and forth, ferrying wounded and prisoners.

The Third Army consolidates

Despite the ground gained, the first day ended with some major concerns. While crossing trenches had proved easy enough for the tanks, moving past the St Quentin Canal was another matter indeed. A crucial bridge at Masnières had been crushed by a tank that had attempted to cross the canal, stopping the planned infantry advance, while another had been mined. The cavalry was delayed by the clogged roads, while a lack of communication frequently meant they were stranded or forced to retreat. A lone squadron of Canadian cavalry realised it was the only unit to make it across the canal at Masnières and was forced to find its way back around and across.

Meanwhile, the key village of Flesquières had not been captured after the advancing tank divisions became separated from the infantry of the 51st (Highland) Division. With no infantry support, the tanks were target practice for the gunners at Flesquières ridge and suffered huge losses. Messengers from the battlefield, some of whom walked the two miles on foot, struggled to convince their commanders that Flesquières had not yet been captured. Crucially, Major General George Montague Harper refused to commit any of the troops held in reserve to take the objective.

The second day required consolidation and advancement. Masnières was taken in the

Great Battles

CAMBRAI

01 The Cambrai offensive gets off to a stunning start as the British tanks face the German artillery across the planned line of attack, rolling forward across trenches and barbed wire. It's impossible to overstate the impact that these machines, had on the morale of the British infantry, when they were working.

03 Like Bourlon and its wood, Flesquières is a vital target and vantage point, but as the British tanks advance beyond the supporting infantry of the 51st Highland Regiment, they are sitting ducks. Pigeons are sent for the cavalry support that never comes, while infantry that is in the vicinity aren't alerted to the fact that they are needed. This is one of the most catastrophic examples of a lack of communication, leading to unforgivable losses.

OPPOSING FORCES

BRITISH LEADERS

Field Marshal Douglas Haig,
General Julian Byng

INFANTRY

2 Corps (6 divisions)

CAVALRY

5 divisions

TANKS

476 (378 fighting tanks)

PLANES

14 squadrons

RESERVES

4 divisions

GAME CHANGERS

378 fighting tanks that enabled the British to move forward at an incredible rate on the first day of fighting.

GERMANS LEADERS

General Georg von der Marwitz, Crown Prince Rupprecht of Bavaria

INFANTRY

1 Corps

PLANES

Baron Manfred von Richtofen's Jagdgeschwader 1 (approx. 40 planes)

GAME CHANGERS

The air force led by Baron Von Richtofen that arrived on the 23 November to combat the RFC and attack the British ground forces.





morning, but as a salient it was open to a punishing amount of shell and machine-gun fire, and the German air force soon reappeared to make life very difficult for the British troops. Meanwhile, the tanks had used all their improvised wooden fascine bridges on the first day, which made crossing the trenches difficult, and the infantry were reluctant to advance without them.

Things looked much better for the IV Corps, which advanced on Flesquières dreading the prospect of a prepared German resistance, only to find it had been abandoned. In contrast, while the cavalry helped take Cantaing, it struggled to work in tandem with the tanks as planned. Similarly, as the tanks moved into villages, it became clear they were not prepared for street fighting. With no machine gun on the top of the tank (it would be introduced in 1918), they were horribly vulnerable to fire from second-storey windows. Still, Fontaine was secured despite heavy losses, leaving Bourlon and its dense wood as the next target.

The offensive was on a knife edge without enough men to consolidate these gains. Fontaine was incredibly vulnerable, but was refused any artillery support and destroyed bridges made moving supplies incredibly difficult. Meanwhile, the German vantage points

“RUNNING FROM TREE TO TREE, WITH THE NOISE OF CEASELESS GUN FIRE, A HUGE NUMBER OF SOLDIERS WERE LOST”

of Bourlon and Bourn Wood posed a serious threat to the British. After a last-ditch effort ordered by Byng to push through, the order came to halt and dig in.

When Haig learned of the attack's successes and failures, he decided to junk the 48-hour time limit and continue the advance. He toured the battlefield, congratulating the men and helping to spread the myth of the lone German gunner at the Flesquières ridge, as that was surely a better explanation for the number of ruined British machines on the battlefield than the alternative. During this apparent lull on 22 November, German forces rushed Fontaine and retook it. Resistance was growing, and as the British dug in for the night in the miserable November cold they knew that their momentum was dripping away. Haig stressed to Byng that Bourn and Fontaine must be captured by the end of 23 November.

Bitter fighting at Bourn Wood

The fresh offensive was major, with 400 guns and 92 tanks, while the 40th Bantam

Division was dispatched to relieve some of the exhausted men at the front. The tanks met fierce resistance in Fontaine, and were forced to withdraw to the disapproval of Tanks Corps intelligence officer Captain Elliot Hotblack, who saw the effect their retreat had on the infantry's morale. Further down the line, German infantry made life hell for the tanks, finding the machine gunners' blind spots and throwing hand grenades inside, leaving the British soldiers trapped and burning.

Having reached Bourn Wood with the help of the tanks, fighting through the thick wood was now the infantry's job alone. It was here that some of the most-intense and gruesome combat was seen. Running from tree to tree, with an unimaginable noise of ceaseless gun and artillery fire, a huge number of British soldiers were lost in Bourn Wood.

When the German forces were finally pushed out, they started shelling it. Meanwhile, both Bourn and Fontaine remained in German hands despite attempts in the afternoon, but the casualties on both sides were horrific. As



Above: Tommies look on as British artillery arrives at Cambrai in December, 1917

Left: German officers pose with a captured British tank in Cambrai. Hundreds of stranded or abandoned British machines were captured during the offensive

Right: Manfred von Richthofen, known as 'The Red Baron', played a pivotal role from the air at Cambrai



night fell, troops were sent to support the men in Bourslon Wood as counter attacks from the Germans continued well into the night. Haig told Byng that Bourslon ridge simply must be taken, so the Guard division was summoned to support and relieve the depleted forces.

Throughout 24 November, shelling and counterattacks continued on Bourslon Wood. Poor weather made it difficult for any RFC pilots to take to the skies and challenge the forces of the recently arrived Manfred von Richthofen, the Red Baron, whose planes rained fire on the wood. German efforts to grind down the soldiers in the wood continued throughout the day. Counterattack met counterattack, and 25 November saw further terrible lapses in communication and bloody skirmishes. Battalions without tank support were mown down by machine-gun fire at Bourslon, while an entire cavalry regiment ordered to wait within sight of the German artillery was shelled. A furious Haig ordered the capture of Bourslon and Fontaine by the 27 November, as German forces continued to push at the exhausted British throughout the night.

A planned attack on 26 November was the cause of fierce argument between Major General Braithwaite, who bemoaned the lack of support and fresh troops, and Byng, who

had his instructions from Haig. The attack went ahead, as Fontaine was taken at tremendous cost and targets in Bourslon Wood were reached. However, there was barely time to note the achievements before counterattacks drove the British forces back.

The German offensive

While skirmishes wore both sides down, the time had come for the major German counter-offensive after reinforcements had been arriving since the second day of the attack. Planned by Crown Prince Rupprecht of Bavaria, and widened by his superior General Erich Ludendorff, it was the first offensive planned against the British since 1915. Gas was fired into the wood two days before the attack, and at 6am on 30 November the assault began. Despite the warnings of some key officers, the British troops were simply not prepared for the assault at Gouzeaucourt, as German soldiers swarmed the British line and amassed prisoners. This was the first instance of the German stormtroop tactics, as the first wave of soldiers went around targets and cut them off as the further troops arrived.

As British soldiers realised what was happening, across all their lines, attempts were made to regroup and stand their ground as startled officers threw down their shaving kits

and looked for their weapons. While German forces broke through in some places and were held up in others, communication broke down once again. There was simply no plan in place for this kind of counterattack, meaning that any attempts to fight back and reclaim ground were made on the hoof.

Much as the Germans had offered fierce resistance, so too now did the British. At Les Rues Vertes, the inspired and determined defensive tactics of Captain Robert Gee meant that their position and the brigade's ammunition dumps were held. He set up a Lewis gun, organised bombing raids against the attackers, killed two Germans who had infiltrated his position and killed the guards, before charging a German machine-gun post with his two pistols. While seeking medical attention he was forced to jump into a canal and swim to safety. His actions earned him the Victoria Cross.

As reinforcements arrived, the Guards Brigade retook Gouzeaucourt, while the forces in Bourslon Wood held determinedly to their positions. The conflict turned into a series of costly but unproductive skirmishes. As the days passed and the casualties mounted, Haig finally realised the necessity to fall back and form a line for the winter. He ordered a retreat on 3 December and by 7 December the lines had settled, with both sides having made considerable gains and losses in territory.

The British casualties numbered 44,207 killed, wounded or missing. The number of German losses has proved harder to calculate, with estimates ranging between 41,000 and 53,300. The battle has proven to be one of the most fertile grounds for myths of the First World War to form, but what is clear is that crucial lessons were learned in how important communication and co-operation between different divisions was.

A lack of support in reserve, a lack of communication, and that terrible desire to overreach led to the attack's failure. While it may have been the first large-scale tank offensive in the war, this landmark came at a terrible cost to both sides.



*A soldier of Somalia's
Transitional Federal
Government stands
guard in 2011.*

The Somali Civil War

Civil War still rages in the Horn of Africa. Find out how warlords and extremist are tearing Somalia apart

WORDS JACK GRIFFITHS

It's 2 December 2014 and militants have shot dead 36 non-Muslim quarry workers in nearby Kenya. This is the second unprovoked attack in the space of a week after 28 people are murdered in a bus hijacking in the same area. As this magazine goes to press, it's unknown whether this was a direct response to the 49 extremist al-Shabaab fighters (including five senior commanders) killed by an airstrike in the southern part of the country earlier in 2014. This is Somalia, a nation that has been in a constant state of civil war for over two decades.

This recent tragedy is only the latest in a legacy of violence. Conflict has been a feature in the country since the downfall of President Siad Barre on 26 January 1991. Barre's autocratic regime fragmented the entire society of a young nation that only gained independence from colonial overlords in 1960. Somalia is dominated by clan politics and, as Barre found out, a centralised government is almost impossible to manage in such a divided nation. The situation has been described as 'neither war nor peace', as militarised clans do battle for domination and control. In 2006, another ingredient was added to Somalia's combustible political situation: Jihadist extremism. Al-Shabaab believes in a puritanical Islamic state for Somalia and opposes any other form of government in the region. It has formally declared allegiance to al-Qaeda and was reportedly responsible for the 2013 Nairobi mall raid, as well as the 2010 Ugandan bombings. It currently controls major parts of central and southern Somalia. The group took German-American writer Michael Scott Moore hostage for 977 days before his release in September 2014, in a hauntingly similar

manner to the way ISIS is currently operating in Syria and Iraq

Since the outbreak of the Civil War in 1991 a number of external powers, from neighbouring states through to the United Nations, have attempted to intervene in Somalia. The most famous of these resulted in the First Battle of Mogadishu, where the ongoing tension between Somalis and the UN and US relief forces was shown. The battle is known as the Day of the Rangers locally and has been made famous by the Hollywood film, *Black Hawk Down*. With sporadic external aid and a weak, fragmented government, Somalia is still in a state of conflict in 2014 with none of the factions able to gain control of the whole country.



SOMALIA'S LONG ROAD FROM COLONIALISM TO CIVIL WAR

1960

Somalia becomes independent after being ruled by Italy and Britain since 1880, the two unite as single republic on 1 July 1960.

1969

Siad Barre comes to power and proclaims a socialist state backed with munitions and money from the USSR. Industry is nationalised and Soviet-style co-operative farms are formed.

1977

Somali forces attempt to seize the Ogaden region of Ethiopia but is defeated after USSR pulls its support and backs Ethiopia instead. Somalia suffers catastrophic losses of manpower.

1960-1991: The seeds of civil strife are sown

Somalia was occupied by both Britain and Italy from the late 19th Century and these two colonial powers ran dramatically different states after the initial scramble for Africa. Italy had control of the southern and central parts of the country and encouraged educational and social advances, as it was one of their few overseas territories, while the British had little real interest in their protectorate, its value being primarily to control the coast and supply meat to British-held Aden, now part of Saudi Arabia. The effects of this inequality can still be seen today with the war-torn and territorially contested capital Mogadishu – once the capital of Italian Somaliland – in the southern side of the country. After independence the situation didn't improve as much as many international onlookers believed it would. Despite gaining freedom from European colonial power, there was a distinct lack of national identity with the majority of Somalis still seeing themselves as part of a clan or ethnic group rather than a

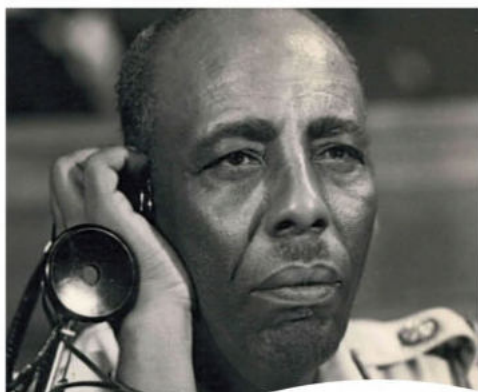
country. The six main family clans in the country are the Isaaq, Dir, Hawiye, Darood, Ogaden and Rahanwayn. Further divided into sub-clans, the conflict of interest between these groups has caused frequent unrest and the underlying feel of common descent has proven stronger than territorial belonging.

A man who tried to change this state of affairs was Siad Barre who became president after a near-bloodless coup d'état in 1969. A former commander in chief of the Somali National Army, Barre created a cult of personality and an autocratic rule. The dictator also enforced a philosophy of 'scientific socialism', which bolstered the country's links with the USSR. Perhaps most decisively, Barre outlawed the clans, angering vast swaths of the population. His premiership was also involved in a disastrous attempted invasion of the Ogaden region of Ethiopia, souring relations between the two nations and putting a huge strain on Somalia's economy. A resistance group known as the Somali National Movement (SNM) was formed in 1982 to put an end to Barre's

regime. Operating from their headquarters in Ethiopia, guerilla attacks unhinged the Somali government. In response, Barre ordered the killing of 50,000 people in the years following. Undeterred, the SNM persisted with their attacks and after increased pressure from neighbouring countries and western powers; Barre signed a peace accord in 1988. However, the unrest and conflict continued as Somalia split into two. On 18 May 1991, the Republic of Somaliland was formed, dividing the north and south of the country. The new republic in the north began to promote stability and its society and economy gradually improved. Back down south, Somalia was heading to civil war.

1991-1995: Famine, war and international involvement

On 26 January 1991, Siad Barre's autocratic regime was overthrown by a United Somali Congress after sustained pressure and aggression from Somali warlords. This would be the last time a formal parliament would be in control for 20 years. The lesson? The warlords



Left: Siad Barre, former president of Somalia following a coup d'état in 1969, made the controversial decision to outlaw clans



An improvised fighting vehicle, or 'technical', prowls the streets of Mogadishu in 1992/3



CT Snow

1982

The Somali National Movement is formed and attacks government garrisons in Burco and Hargeisa. The Government responds by killing 50,000 people.

1988

Resistance continues through the decade as Barre's grip weakens. A major SNM offensive captures the cities of Hargeisa and Berbera.

1991

Barre is forced to flee when the capital of Mogadishu is captured by rival clan militias. The Somali Democratic Republic is finished and the Civil War begins.

1992

An estimated 350,000 Somalis die of disease, starvation and war. Images of famine and war are shown on world news networks. Operation Restore Hope begins

1993

The First Battle of Mogadishu breaks out as Somali rebels shoot down two US helicopters, resulting in the death of 18 US Army Rangers and one Malaysian fighter.

1994

The US formally ends the mission to Somalia, which has cost \$1.7 billion dollars and left 43 US soldiers dead and another 153 wounded.

held the true power in Somalia. Widespread famine and violence continued as none of the militant factions could agree on a suitable replacement for Barre. No single clan was in the position to take full control so regions became fragmented with different pockets of support scattered over the country. The United Nations decided that their involvement was required and by 1992, were in place to deliver aid and ensure steps were made towards peace. The mission would be called UNOSOM. The fighting in Mogadishu alone had killed 25,000 people and displaced 2 million. Another 800,000 had fled the country into neighbouring states. A ceasefire was negotiated by the UN in early 1992 and US forces arrived in December to maintain order. This was optimistically called Operation Restore Hope.

Despite the US and UN intervention, conflict still persisted as the destruction of farmland and livestock extended the effects of famine. The famine only eased in 1993 as external aid slowly began to filter its way down. This was only one part of the Somali reconstruction

US Marine Corps Bell UH-1N Twin Huey helicopter takes off from Kenya in 1995 to provide support for the US forces in Somalia



African Union Mission in Somalia (AMISOM) troops in battle near the Daynile district of Mogadishu in 2011

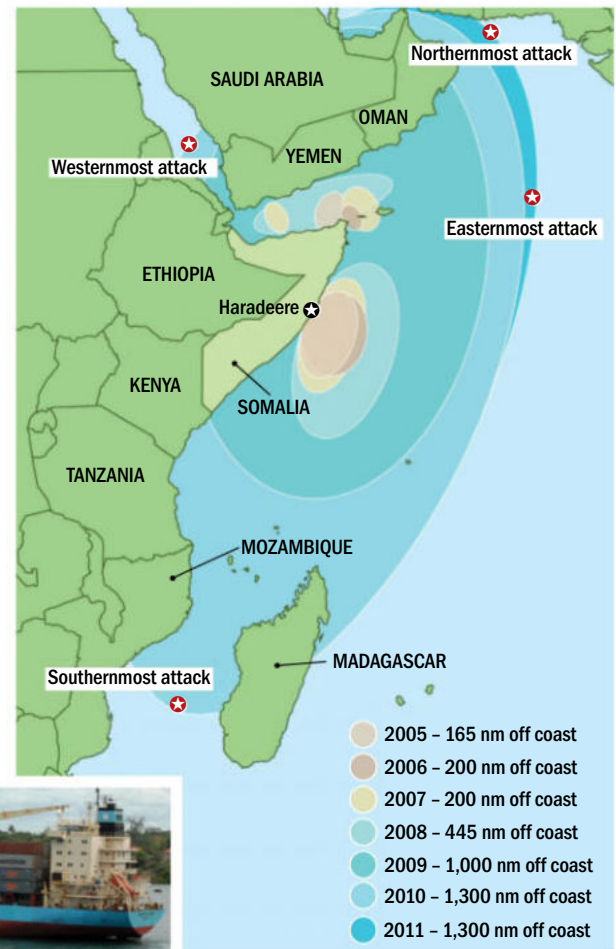


PIRACY IN SOMALIA

If the Civil War achieved one thing, it was the shattering of the already fragile Somali economy. Now based on no more than livestock and telemarketing, many Somalis have turned to other streams of income. One of the most popular is piracy. The high watermark of Somali piracy was in 2011 when 176 attacks were registered in that year. The pirates operate in the Gulf of Aden and the Western Indian Ocean. The attacks centre on humanitarian aid shipments and holding hostages for high ransoms. The most well known attack is perhaps the Maersk Alabama hijacking in 2009. Counter-piracy naval patrols have been assigned to protect the ships from pirates with Operation Atlanta beginning in 2008 and is still ongoing. Its growing influence has seen piracy decline to only seven attacks in 2013 and only two so far in 2014.

Many small incidents go undetected however so the battle will continue to wage on. Even with the implementation of counter-piracy measures, Somali pirates will always be a threat if the lack of authority and security in their homeland continues. The correlation between slight improvement in home affairs and a drop in piracy is no coincidence.

MV Maersk Alabama shortly after the attack by Somali pirates in 2009



1996

Somalis suffer heavily under Mohamed Farah Aideed's reign and from subsequent fighting among warlords. Hussein Farah Aideed takes over after his father's assassination.

1999

Ethiopian forces cross over into Somalia to try and suppress Islamist militias who are threatening its borders. Aided by some local factions, Ethiopia occupies key towns.

2000

The Somalia National Peace Conference is held by in the town of Arta in neighbouring Djibouti by AMISOM. The TFG is founded (under another name), a ceasefire is agreed and UN aid returns.

2003

The 14th attempt at a government since 1991 takes power. Abdullahi Yusuf becomes president, after serving as the first president of autonomous Puntland.

2006

Ethiopian troops re-enter Somalia while the Islamic Courts Union (ICU) forms and captures Mogadishu from the warlords. The conflict now becomes a holy war.

2006

Huge amounts of Somali citizens flee to nearby Kenya in hope of escaping the war, which has become more and more brutally violent after the formation of the ICU and al-Shabaab.

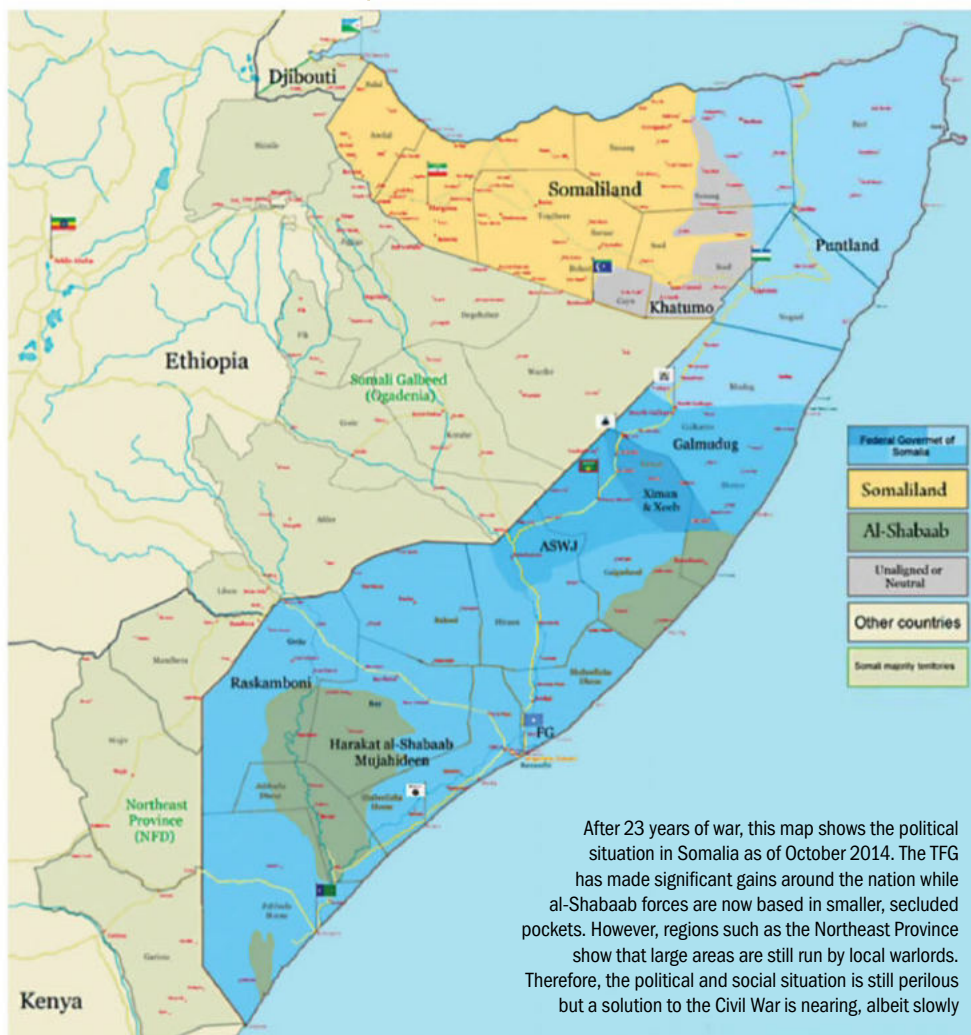
jigsaw though; there was still a society that needed rebuilding. Despite intentions of restoring law and order, UN and US diplomacy didn't have the required effect, as conflict continued unabated in many areas of Somalia. The majority of the local tribes didn't take kindly to the US ground forces and began to oppose the intervention. As well as providing security and aid, the US forces began to get involved in clan politics. The aim of Operation Gothic Serpent was to capture Mohamed Farrah Aidid, a military commander who had openly stated his opposition to the US intervention. Gradually, the Americans were drawn from their initial objectives in a murderous mission creep, as aid and relief slowly mutated into sorting out power struggles. Rightly or wrongly, this resulted in more and more Somalis beginning to despise foreign intervention and the 'nation-building' mission. Conflict was imminent.

Mogadishu is one of the most dangerous cities in the world and the American 75th Ranger Regiment found this out on 3 October 1993. Somali gunmen took the American forces by surprise, killing 19 and wounding 80 in street skirmishes across the capital. One of the most violent conflicts involving US soldiers since Vietnam, the Rangers were pinned down for 17 hours by Somali rebels armed with RPGs and automatic weapons. These rocket-propelled grenades were responsible for the downing of two UH-60 Black Hawk helicopters, now an enduring image of the battle. The fighting ended with over 500 armed Somali insurgents dying and around 1,000 more wounded as the US troops fought back. Ironically, the US forces declined to use tanks to create a more peaceful image. A peacekeeping mission had been turned into a running battle. This incident underlined for the US that the situation in Somalia could not simply be resolved by force. The American military withdrew on 4 November 1994 and the UN followed in March 1995 with other nations on their heels. The first age of intervention had effectively ended. It had succeeded in bringing about a ceasefire but struggled, and ultimately, failed to build a new, peaceful and functioning state. Somalia was now on its own.

1995-2006: 14 governments and clan rivalry

The United Nations undoubtedly helped prevent Somalia from spiralling further into the depths of poverty and austerity. However, the social situation was not properly addressed and clans still ran the show in a decentralised and weak nation. The clan fighting in southern Somalia was so severe, that other regions of the country became ardent supporters of independence from the south. One of these areas was Puntland on the northern tip of the Horn of Africa. In August 1998 they got their wish as it

SOMALIA, THE CURRENT SITUATION



After 23 years of war, this map shows the political situation in Somalia as of October 2014. The TFG has made significant gains around the nation while al-Shabaab forces are now based in smaller, secluded pockets. However, regions such as the Northeast Province show that large areas are still run by local warlords. Therefore, the political and social situation is still perilous but a solution to the Civil War is nearing, albeit slowly

A Nepalese soldier providing protection for UN staff in 1993



was declared an autonomous state. It differs from Somaliland – the territory in the North West that overlaps the original British colony and declared itself independent in May 1991 – as the region is not internationally recognised and is only semi-autonomous. It does not wish to rid itself completely of its Somali roots, just to detach itself from the clan warfare. Jubaland is another area at the southern end of the country that wants to distance itself from the Civil War that is rapidly condensing to South-Central Somalia.

In a country devastated by war, women have seen their role increase slowly in economics and society. Traditional Somali culture historically gave women the role of second-class citizens but since the war began in 1991, they have seen their status increase. With men preoccupied by conflict, women have taken an active role in the economics, becoming the main breadwinners of many households. With

2007

The TFG regains control mainly thanks to assistance from the Ethiopian army. Mogadishu is back in the hands of the warlords.

2007

US airstrikes begin on al-Shabaab targets and their military commander Aden Hashi Ayro is killed. The AU begins a peacekeeping mission to Somalia to help the war torn nation.

2008

The threat of Somali piracy begins to increase in the Gulf of Aden. Operation Atalanta is created by the European Union to stop the pirates.



2009

With the Ethiopian troops now back in their own country, al-Shabaab militants take control of the city of Baidoa and steadily increases its influence in southern Somalia.

2010

Suicide bombings in Uganda kill 74. Al-Shabaab are believed to be behind the terrorist act.

economic and social standing, women have the power to promote and demonstrate for peace and act as emissaries between factions. By 2000, women began to gain ministerial positions in both Somaliland and Puntland, which is in stark contrast to their often-unemployed male family members

By the year 2000 the clan elders reached an agreement to quell the warring factions. It was decided in a conference in the tiny neighbouring country of Djibouti, that former finance and interior minister Abdulkassim Salat Hassan would become the head of a new interim government hoping to bring order to the country. The movement was part of the Transitional National Government (TNG), which would later become the Transitional Federal Government (TFG). A series of presidents ruled through the TFG as Somalia made strides to improve. Nevertheless, none of these would-be statesmen were able to properly establish control. The clan system was still dominant across the nation and the rival Islamic Courts Union (ICU) was on the rise. Subsequently, the TFG remained unpopular. Though conditions were poised between war and peace, no single government could ever maintain a long-term grip on the country and there was no state to speak of. When Abdullahi Yusuf Ahmed came to power in 2004, he was the 14th president since 1991. Despite the title 'president', the leader of the TFG only controls the areas the TFG has monopoly over. In this period, TFG territory was only a small part of Somalia and by 2006, it would get even smaller as a new threat to fragile nation emerged.

2006-2012: Extremist Jihadism, piracy and invasion

The weakness and indecisiveness of the TFG led to the upsurge of al-Shabaab, a growing faction of Islamic militants who have pledged allegiance to al-Qaeda. Translated as 'The Youth', the group was formed in 2006 and strives to establish an Islamic theocracy in Somalia. Its emergence has helped extend the Civil War and further dismantle the nascent state. Al-Shabaab is undoubtedly the successor to al-Ittihad al-Islamiya (aka Islamic Union), an extremist group that was active in the previous decade. Originally a small group, al-Shabaab's numbers swelled as a response to Ethiopian troops marching over the Somali borders in 2006. If it wasn't for this intervention however, al-Shabaab may have

A US helicopter flies over the Mogadishu suburbs as part of Operation Restore Hope



A US Marine with an M-249 SAW keeps watch from his vehicle in 1992

seized complete control of the capital. In July 2006, the Second Battle of Mogadishu saw a decisive ICU and al-Shabaab victory as they gained control over many districts. This lasted for a matter of months before the city was relieved by Ethiopian troops on 28 December. The Ethiopian military helped break up the ICU but the Islamic militants still made significant gains and by 2008 they had wrested control of many areas of Southern Somalia from the clans. Somalia remained under military control until January 2009 when Ethiopia pulled its army out after extensive losses. From here on out, al-Shabaab consolidated its power taking control of Baidoa, an important city for the TFG. Conditions have only got worse for the people of Somalia and many believe that al-Shabaab's presence has undone the gradual reconstruction of the late Nineties. In 2011, the worst drought in six decades brought back the old days of starvation and famine as many fled to Kenya and Ethiopia. Civil war had returned and it was now an ideological conflict.

Most recent aid has come from the African Union Mission in Somalia (AMISOM). Created to protect the TFG and generally improve conditions in the country, the AMISOM was the brainchild of the African Union of States (AU). Made up of over 6,000 personnel from Uganda, Kenya, Burundi, Djibouti and Sierra Leone they successfully eliminated the al-Shabaab forces in Mogadishu. Since then,

al-Shabaab have undertaken more extreme terrorist attacks rather than expansion. This may well be a sign that the extremist group's power to contest and hold territory is on the wane. Despite still being prominent in Southern Somalia, it is apparent that they are too radical for the vast majority of the Somali population to relate to. In September 2014, the militants received another blow after their leader Ahmed Abdi Godane was killed in a US airstrike. In addition to airstrikes, cutting-edge Predator and Reaper drones are being frequently used by a US government increasingly keen to avoid committing ground troops in the wake of Iraq and Afghanistan and in January 2014, the mastermind of the 2010 Ugandan bombings was killed by hellfire missiles launched from a US drone. The Civil War is evolving from frontline battles like the First Battle of Mogadishu to small skirmishes and acts of terror and reprisal.

Despite one million Somalis still requiring emergency food aid, there are signs of improvement in Somalia. Al-Shabaab only number around 5,000 fighters after the African Union's intervention stunted its rise. Even if al-Shabaab decline further, security issues and clan-based violence are set to stay, at least in the short term. The government still adheres to the '4.5 formula', which states that parliament reflects the clan structure of Somalia in a power-sharing scheme. With the capital Mogadishu free from the Jihadist forces and under a more stable government, it remains to be seen whether the Civil War, that has killed at least 500,000 people, is coming to an end. Prime Minister Abdiweli Sheikh Ahmed has claimed that "Somalia has now turned a corner." With war still ongoing, this 'corner' may still be a fair distance away.

“The Ethiopian military helped break up the ICU but the Islamic militants still made significant gains”

2011

176 pirate attacks are reported. Warlords gain more power as AMISOM takes control of Mogadishu and drives al-Shabaab forces out of the capital.

2013

Abdiweli Sheikh Ahmed becomes Prime Minister and promises that Somalia will 'turn a corner'. A significant raid on a mall in Kenya is once again instigated by the jihadist fighters.

2014

German-American writer Michael Scott Moore is released in September after being held hostage by Somali pirates for 977 days.

2014

On 26 November, Kenya Defence Forces kill 49 al-Shabaab fighters including five senior commanders with an air strike.

2014

On 2 December, al-Shabaab militants kill 36 non-Muslim quarry workers in nearby Kenya. This is the second unprovoked attack to take place in the space of just one week.

2014

Just a day later, a suicide car bomb kills several people by the UN convoy in Mogadishu.



Heroes of the Medal of Honor

BENJAMIN F WILSON

This one-man army led the charge in an uphill struggle, single-handedly taking on Communist forces in Korea to protect his platoon

WORDS JACK PARSONS

The Medal of Honor is the highest military honour in the United States, awarded for personal acts of 'conspicuous gallantry' and going beyond the call of duty. The medal was awarded to First Lieutenant Benjamin F. Wilson by President Eisenhower himself for the officer's heroic actions single-handedly taking on enemy forces during the Korean War. Despite serving in two wars, Wilson's military career almost passed entirely without distinction of any kind. He enlisted in the US Army in 1940 aged 18, seeking escape from his sleepy seaside home in Washington. Stationed at Schofield Barracks, Hawaii, he reached the rank of Corporal when the Japanese attacked Pearl Harbor on 7 December 1941. There is little known about Wilson's actions on that day, though he once joked that the Japanese bombing woke him up from a rare lie-in.

He was later commissioned as a Second Lieutenant in 1942, after attending the Officer Candidates School. But despite frequently applying for combat service, Wilson's WWII experience passed peacefully, with the Army keeping him stateside in training roles.

Having never seen active duty, when the war was over Wilson resigned his commission and returned home to Vashon Island, Washington. However, working in the lumber mills didn't agree with him, and he was back in uniform within nine months. Even with the looming threat of the USSR in the Cold War, the United States Army was thinning its ranks, and recruitment officers told Wilson they had no need for a lieutenant, even an experienced one. Wilson was more interested in action than rank, so re-enlisted as a private recruit all over again and was sent to Korea.

It was here that Wilson finally got the chance to prove himself in battle. By the summer of



FOR VALOUR

The USA's highest military honour is awarded to members of the armed forces for exceptional acts of valour in combat. This is when service personnel have gone beyond the call of duty, often placing themselves in difficult situations beyond reasonable expectation.

WHY DID HE WIN IT?

For showing outstanding bravery in both leading the charge against an enemy force and providing cover fire so that his troops could safely retreat. He even received a life-threatening injury.

WHERE WAS THE BATTLE?

Near Hwach'on-Myon, South Korea

WHEN DID IT TAKE PLACE?

5 June 1951

WHEN WAS HE AWARDED THE MEDAL?

7 September 1954

WHAT WAS THE POPULAR REACTION?

While Wilson's exploits were not widely reported in the press, he was honoured with a Distinguished Service Cross and Purple Heart along with his Medal of Honor, and later went on to become a Major.

1951, his experience had seen him promoted to First Sergeant in Company I, 3rd Battalion, 31st Infantry Regiment, part of the 7th Infantry Division. On 5 June, his company was charged with taking the largest hill overlooking the Hwachon Reservoir. Also known as Limbo's Dam, or Hell's Waiting Room, the dam had proven a focal point for fighting between Allied and Communist forces in recent months.

The hydroelectric dam was not only a strategic asset, because it was a source of power for South Korea, but also because it could be used to flood downstream areas. At midnight on 8 April 1951, Chinese and North Korean forces captured the dam and opened the spillway gates, raising the Han River level by four feet and washing away five floating bridges. These included connections to the United Nations Command – the headquarters of the multinational Allies in Korea.

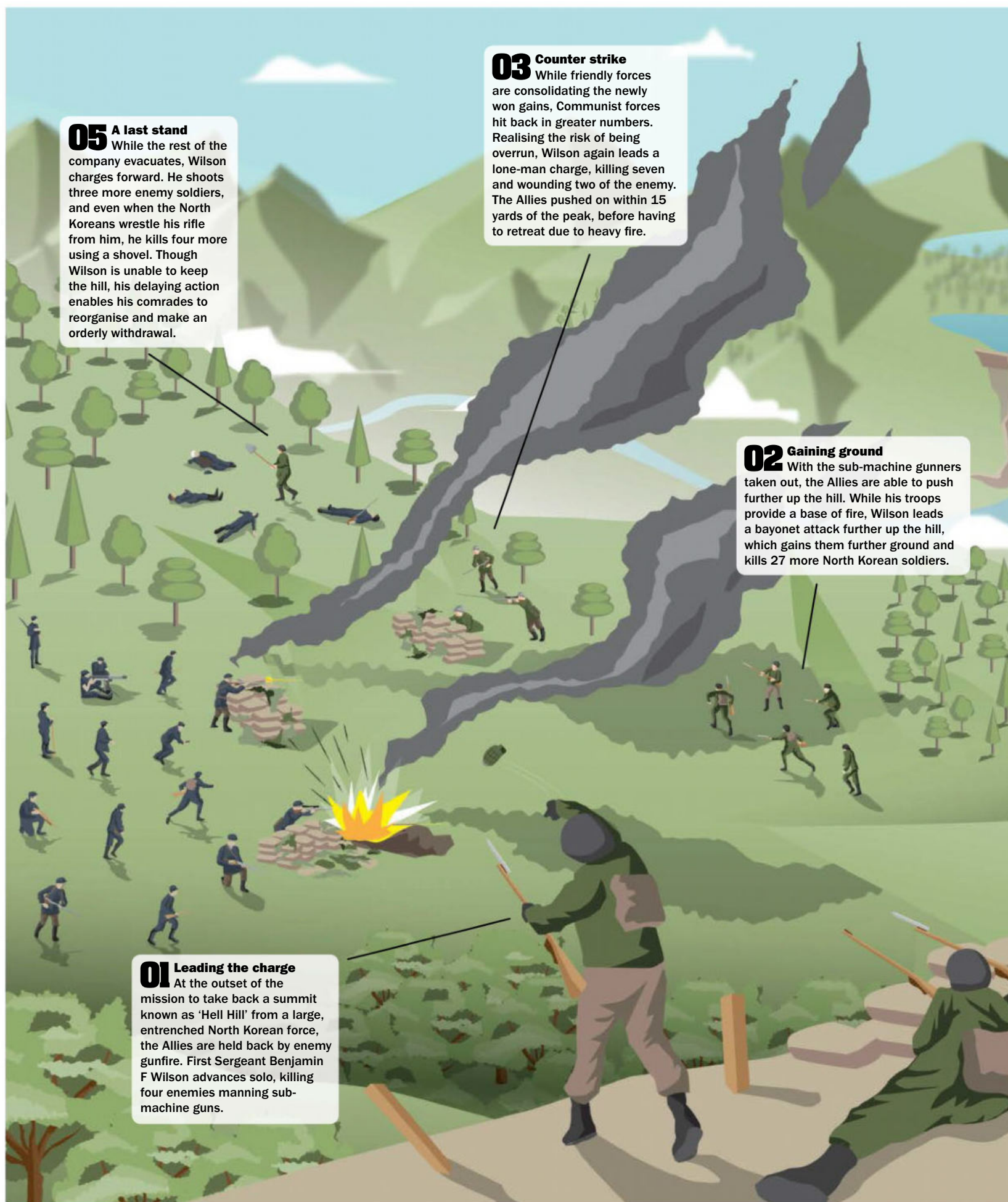
The Allies' initial attempts to take back the reservoir were beset by problems. The 7th Cavalry Regiment attacked north towards the dam, but only made it within half a mile before being pushed back by Communist forces. As well as the enemy holding the higher ground, the terrain made ground assaults on the reservoir even more challenging for the Allies. The hilly countryside and poor roads meant that armoured vehicles couldn't make it to the dam, while it was also much harder to transport artillery, so only one battery of 155mm howitzers could range the dam, rather than the three battalions that were assigned. This also made it difficult to deliver boats for amphibious assault on the dam.

Ultimately, the Allies were only able to stop enemy forces from using the dam as a weapon with the help of air support. On 30 April, AD-4 Skyraiders dropped 2,000-pound bombs on the reservoir, along with rocket fire. However, this still wasn't enough to destroy the 20-foot-tall and 40-foot-wide steel flood gates, which were reinforced with concrete. Eight Skyraiders had to return the next day armed with MK13 air torpedoes – the last time this weapon was ever used in combat – to be able to destroy one sluice gate and damage many others.

Though the attack had negated the military value of the dam, the Allies still wanted to



President Eisenhower
shaking hands with
Benjamin F Wilson



05 A last stand While the rest of the company evacuates, Wilson charges forward. He shoots three more enemy soldiers, and even when the North Koreans wrestle his rifle from him, he kills four more using a shovel. Though Wilson is unable to keep the hill, his delaying action enables his comrades to reorganise and make an orderly withdrawal.

03 Counter strike While friendly forces are consolidating the newly won gains, Communist forces hit back in greater numbers. Realising the risk of being overrun, Wilson again leads a lone-man charge, killing seven and wounding two of the enemy. The Allies pushed on within 15 yards of the peak, before having to retreat due to heavy fire.

02 Gaining ground With the sub-machine gunners taken out, the Allies are able to push further up the hill. While his troops provide a base of fire, Wilson leads a bayonet attack further up the hill, which gains them further ground and kills 27 more North Korean soldiers.

01 Leading the charge At the outset of the mission to take back a summit known as 'Hell Hill' from a large, entrenched North Korean force, the Allies are held back by enemy gunfire. First Sergeant Benjamin F Wilson advances solo, killing four enemies manning sub-machine guns.

Praise for a hero

“Lieutenant Wilson’s sustained valor and intrepid actions reflect utmost credit upon himself and uphold the honored traditions of the military service”

Official citation for Wilson’s Medal of Honor

regain control of it. Wilson’s company had been sent to capture the nearby summit, which in the coming days would earn the nickname ‘Hell Hill’. Wilson was soon caught in a literal uphill struggle, with his men taking on a much larger enemy force that was ensconced in heavily fortified positions on the peak.

As the North Koreans rained down small arms and automatic weapon fire, preventing the Allies from being able to move forward, Wilson charged ahead, firing his rifle and throwing grenades. The heroic action killed four enemy soldiers manning sub-machine guns, allowing the Allies to get a foothold on the hill. With supporting forces providing cover fire, Wilson led a bayonet attack further up the hill, killing 27 more North Koreans.

While the company tried to consolidate its position on the hill, the enemy launched a counterattack. Lieutenant Wilson, having realised the imminent threat of being overrun, made another lone-man charge, killing seven soldiers, wounding two, and routing the remainder in disorder.

Wilson’s forces were now able push on to within 15 yards of the summit, when enemy fire once again halted the advance. However, this time the enemy fire was far too overpowering, and he ordered the platoon to withdraw. Characteristically, Wilson remained to provide his retreating troops with cover fire – taking a bullet wound to the leg in the meantime.

With a life-threatening injury, medics tried to evacuate Wilson to a MASH station. They carried him down the hill on a stretcher, as the battle drew to an end. About halfway down the hill, Wilson’s stretcher-bearers put him down to rest. Not being one to give in easily, but clearly

in pain, Wilson got up from the stretcher and made his way back up the hill in spite of his injuries. However, at this point everyone else was retreating, so he was almost the only US soldier on the offensive.

Already injured and greatly outnumbered, Wilson pushed on against seemingly insurmountable odds. He charged the enemy ranks with his rifle, killing three enemy soldiers. When enemy soldiers physically wrestled the rifle from his hands, he pulled out his standard-issue entrenching shovel and beat four more enemies to death. This delaying action enabled his comrades to make an orderly withdrawal.

While this is the instance that earned Wilson the Medal of Honor, the story doesn’t end there. The next day he killed 33 more Chinese soldiers with his rifle, bayonet and hand grenades in another one-man assault. In the process, he reopened the wounds he suffered the day before and was finally evacuated to a hospital. He was again recommended for the Medal of Honor, but Army policy prohibited any man from being awarded more than one. Wilson received the Distinguished Service Cross instead and was commissioned when he returned to the States. He retired from the Army as a Major in 1960 and died in Hawaii in 1988.

04 Return to the fray

While his troops retreat, Wilson provides covering fire, but takes a bullet to the leg. Medics try to evacuate Wilson to a hospital, however, as soon as they put his stretcher down for a rest, he limps off back up the hill to rejoin the fight.

Hwachon Dam



Soldiers from Wilson’s 31st Battalion firing field cannon days after Wilson earned his Medal of Honor



Corbis; Ed Crooks

GAS! GAS! GAS!

WWI's silent super weapon

WORDS NICK SOLDINGER

On 22 April 1915, a lone BE2 aircraft of the Royal Flying Corps hummed over the silent battlefields around Ypres, Belgium. It was a fine, fresh spring day. The skies were blue, a light easterly breeze was blowing and the Algerian-French and German troops in the opposing trenches below seemed to be taking a breather from the slaughter. As the plane circled, however, its 22-year-old observer Archibald James spotted something no one had ever seen before – something strange and otherworldly. “Suddenly to the north of us, we saw this yellow wall creeping towards our lines,” he later recalled. “We

reported it when we landed. An hour later the stench of chlorine had reached our aerodrome.”

What James had witnessed was the first attack in history using a weapon of mass destruction. The Germans had just unleashed 168 tons of chlorine gas against the French-Algerian troops holding the line opposite. The effect was devastating. A five-foot-high cloud had skulked its way across No Man’s Land, watched by the puzzled and completely unprotected North Africans until it had smothered them. Within ten minutes, thousands of twisted corpses lay scattered across the battlefield. War would never be the same again.

BENT DOUBLE, LIKE OLD BEGGARS UNDER SACKS,
 KNOCK-KNEED, COUGHING LIKE HAGS, WE CURSED THROUGH SLUDGE,
 TILL ON THE HAUNTING FLARES WE TURNED OUR BACKS
 AND TOWARDS OUR DISTANT REST BEGAN TO TRUDGE.
 MEN MARCHED ASLEEP. MANY HAD LOST THEIR BOOTS
 BUT LIMPED ON, BLOOD-SHOD. ALL WENT LAME; ALL BLIND;
 DRUNK WITH FATIGUE; DEAF EVEN TO THE HOOTS
 OF TIRED, OUTSTRIPPED FIVE-NINES THAT DROPPED BEHIND.
GAS! GAS! QUICK, BOYS! – AN ECSTASY OF FUMBLING,
 BUT SOMEONE STILL WAS YELLING OUT AND STUMBLING,
 AND FLOUND'RING LIKE A MAN IN FIRE OR LIME . . .
 DIM, THROUGH THE MISTY PANES AND THICK GREEN LIGHT,
AS UNDER A GREEN SEA, I SAW HIM DROWNING.
 HE PLUNGES AT ME, GUTTERING, CHOKING, DROWNING.
 IF IN SOME SMOTHERING DREAMS YOU TOO COULD PACE
 BEHIND THE WAGON THAT WE FLUNG HIM IN,
 AND WATCH THE WHITE EYES WRITHING IN HIS FACE,
 HIS HANGING FACE, LIKE A DEVIL'S SICK OF SIN;
 IF YOU COULD HEAR, AT EVERY JOLT, THE BLOOD
 COME **GARGLING FROM THE FROTH-CORRUPTED LUNGS,**
 OBSCENE AS CANCER, BITTER AS THE CUD
 OF VILE, INCURABLE SORES ON INNOCENT TONGUES,
 MY FRIEND, YOU WOULD NOT TELL WITH SUCH HIGH ZEST
 TO CHILDREN ARDENT FOR SOME DESPERATE GLORY,
 THE OLD LIE; DULCE ET DECORUM EST
PRO PATRIA MORI.

Wilfred Owen

INDUSTRY AND INVENTION

Scientists, soldiers and profiteers – how one man's pioneering research gave birth to an unholy trinity

The idea of using poison gas as a weapon was not new, but it was deemed so ungentlemanly that its use was outlawed by the 1899 Hague Convention. By the winter of 1914, however, World War I had descended into deadlock and Germany's generals were open to fresh ideas – even from civilians.

Step forward the country's top chemist, Dr Fritz Haber. Driven by a powerful sense of patriotism, Haber was convinced scientific know-how could break the stalemate. He knew that Germany's chemical industry produced tons of poison gas as a by-product, so began searching for one that was suitable for military use. He was searching for one that could, in varying temperatures, create a cloud big enough to saturate the air to lethal levels. It was a big ask, but what he brought the chiefs of staff was an asphyxiating substance commonly used in the dye industry – chlorine gas.

Haber was championed by Carl Duisberg, the head of Germany's chemical giant Bayer AG, and the generals were persuaded not only to sponsor Haber's continued research, but to buy the deadly gases he recommended from Duisberg in industrial quantities. Ungentlemanly it may have been, but chemical warfare was clearly good for business.



The medical officer at the Chittening weapons factory admitted that, compared with production, safety took a "somewhat secondary position"

INSIDE THE WAR FACTORY

Britain goes into the chemical warfare business – with deadly results

After Germany's initial gas attacks, the British Government was at first outraged, but within weeks the War Office was planning how to retaliate. The trouble was that German scientists were technically way ahead. They had the most developed chemical industry in the world, and had been producing gasses such as chlorine safely since the 1880s.

Britain was desperate to catch up. The chemical warfare research facility at Porton Down in Wiltshire was quickly set up, and it was here that scientists and soldiers alike tried to work out the German methods of poison-gas production.

At the same time, three armaments plants, or National Filling Factories as they were known, were earmarked to manufacture the WMD – one at Chittening, Avonmouth, a second in Hereford and a third in Gloucester.

By November 1918, Chittening alone had produced 85,424 mustard gas shells, but the human cost to the workforce had been disturbingly high.

Compared with German factories, British safety standards were primitive at best and the urgent need for supplies coupled with dozens of daily shop-floor injuries meant there were scarce resources to improve them.

The hazards at Chittening were so great, that it built its own on-site hospital. A report written at the end of 1918 revealed that of the 1,100 mostly female workers at the plant, 710 had reported sick, a further 160 had suffered burns, while three had died of accidents. Another four fell victim to associated illnesses – all within one six-month period. It's no wonder some workers joked they'd be safer serving at the front.



Women war workers preparing chemical-carrying shells for the front. Effective protective equipment wasn't introduced until the war was almost over

DEADLY CHEMICALS

As protective measures against poison gas improved, scientists became embroiled in an arms race to find new deadly materials

XYLYL BROMIDE GAS

Location: Bolimov, Poland

First Used: 31 January 1915

Effect: German 'stink pioneers' (the nickname given to the army's gas units) fired 18,000 artillery shells containing non-lethal tear gas at Russian positions along the Rawka River during the Battle of Bolimov. The intent was to incapacitate the enemy by causing blindness and serious irritation to the nose and throat. Instead of vaporising, though, the chemical froze and failed to have any impact on the battle at all.

CHLORINE GAS

Location: Ypres, Belgium

First Used: 22 April 1915

Effect: At Langemarck near Ypres, German forces released a toxic cloud from 6,000 gas cylinders that swamped unsuspecting French troops opposite. The chemical reacted with water in their lungs to create hydrochloric acid, inducing coughing, vomiting and ultimately death. Around 5,000 were killed, and an 8,000-metre hole was punched in the Allied line. German generals, however, were totally unprepared for the scale of the success, and had insufficient troops to seize the advantage. The gap was soon plugged by Canadian reserves.

"IT WAS TRAGIC. EVERYWHERE WERE FUGITIVES. INFANTRY WITHOUT WEAPONS. HAGGARD. GREAT COATS DRAWN AWAY OR WIDE OPEN. RUNNING AROUND LIKE MADMEN, BEGGING FOR WATER IN LOUD CRIES. SPITTING BLOOD OR ROLLING ON THE GROUND, MAKING DESPERATE EFFORTS TO BREATHE"

Jean Mordacq, French commander of Algerian troops gassed at Ypres in 1915



LEATHER GAS MASK

Both rubber and leather were used for constructing masks. Leather devices were made from a single piece of hide dipped in a sealant to prevent leaks. The eyepieces were made with clear celluloid coated with gelatine to prevent misting.

AIR FILTER

The metal air filter contained gas-neutralising chemicals and would need to be replaced after each gas attack. The filters typically had a life span of a few of hours after exposure.

CANISTER

Although some soldiers would wear the case around their necks in the "ready alert" position, troops were provided with a tin gas mask case to protect it while not in use. A mask damaged by shrapnel could prove fatal.

BELL

Different methods were used to alert troops of an incoming gas attack. In the British trenches it could be anything from a dinner gong to an old-fashioned wooden football rattle. Heavy alarm bells were often found in German trenches.

PHOSGENE GAS

Location: Wieltje, Belgium

First Used: 19 December 1915

Effect: By now, Allied respirators were sufficiently evolved to protect against chlorine gas, so phosgene was introduced as a replacement. Twice as toxic as chlorine, phosgene reacts with proteins in the lung. A lethal dose can create up to four pints of yellowish liquid that drowns the victim, from the inside out, over a period of 48 hours. Thanks to solid intelligence, the British were prepared for the first phosgene attack, though, and casualties were limited to around 1,000.

DIPHOSGENE GAS

Location: Verdun, France

First Used: 22 June, 1916

Effect: German scientists realised that mixing phosgene with chloroform could destroy the filters in the respirators then being used, enabling the gas to choke the victim to death. Around 116,000 shells containing this new terror weapon were fired at French forces defending Verdun in what would go on to become the costliest battle in history. Despite suffering 1,600 casualties, the French line held and the battle raged on for a further five months.

MUSTARD GAS

Location: Ypres, Belgium

First Used: 12 July 1917

Effect: Germans scientists' search for a substance to make respirators redundant led to mustard gas. Actually an oily liquid that stuck to the skin and clothes, it could also infest the body if ingested. It caused terrible burns, blindness, internal blisters and pneumonia. Although fatalities appeared relatively low – of the initial 2,200 casualties, just 95 died – mustard gas also effectively poisoned DNA. As a result, cancer would claim countless veterans' lives long after the war had ended.

GAS! GAS! GAS!



‘WE WERE SUBJECTED TO A HEAVY GAS BOMBARDMENT. TOWARDS MORNING I BEGAN TO FEEL PAIN. IT INCREASED EVERY QUARTER HOUR [UNTIL] MY EYES WERE SCORCHING. A FEW HOURS LATER MY EYES WERE LIKE GLOWING COALS... ALL WAS DARKNESS AROUND ME’

Corporal Adolph Hitler, 16th Bavarian Reserve Regiment, gassed a month before the Armistice



THE OLD LIE IS LAID BARE

As the soldiers came home, broken by battle, the public realised the folly of the “war to end all wars”

When on 11 November 1918 the final curtain fell on World War I, relieved and ecstatic crowds gathered in town squares across the globe. But for soldiers on both sides, men who'd spent the past four years murdering one another in the mud, there was nothing really to celebrate. As night fell on what had been the Front, they sat around the first campfires they'd been able to light in years. The mood was sombre. It was a night to toast the dead, to reflect on what they'd been put through, and to wonder about what the future would bring.

The morale that had carried them through the horrors of trench warfare evaporated in the post-war comedown. Returning soldiers discovered that the politicians' promise that they'd return to 'a land fit for heroes' was just another hollow soundbite. Welfare, compensation and even work was hard to come by, particularly for the wounded. Many now questioned what it was they had fought for in the first place.

Fathers, brothers, sons all returned to their families as broken men. Terror weapons like poison gas had played their part in this. Crawling into men's minds, as well as their bodies, it left many with long-term health problems and deep psychological scars.

Even those who'd been on the victorious side were distant and gloomy rather than jubilant. If they did speak about the war, it was to express anger and resentment at having been betrayed and exploited by those in charge. These powerful feelings soon began to seep into the collective consciousness. It was a dark mood that, in time, caused seismic shifts in power and, within just 20 years, another war far worse than the one just fought.

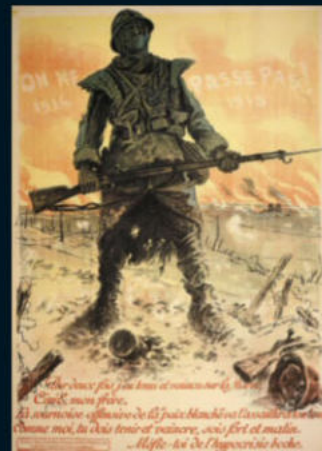
DULCE ET DECORUM EST

How politics brought propaganda, poison gas and poetry together

Wilfred Owen's 1918 poem 'Dulce et Decorum Est' about a gas attack is one of history's most radical anti-war statements. Patriotism, it declared (at a time when to suggest such a thing was almost heresy) was nothing more than “an old lie”.

The poem's ironic title is Latin for “It's sweet and fitting to die for one's country”, and was aimed directly at the propaganda that was coaxing a generation of young men into the meat grinder of the Western Front.

Owen was a veteran of the trenches. He'd seen the horror close up and wrote the verse while recuperating from shell shock. Its nightmarish imagery would have rung true to the troops, but to the public, spoon-fed a saccharine version of events by dishonest politicians and a partisan press, its nightmarish vision was grotesque. Owen returned to the front in 1918 and was killed a week before the Armistice, aged 25.



THE BATTLE OF CAPORETTO

How poison gas was the key to one of the most significant military victories of the 20th Century

By autumn 1917, Germany's ally Austria-Hungary had fought itself almost to exhaustion along Italy's Isonzo River. It had engaged in 11 battles against the Italian army there since May 1915. German commanders, fearing the front would collapse, sent seven divisions south to help launch a decisive victory and during the ensuing Battle of Caporetto that followed, poison gas played its most pivotal role of the war.

At 2am on 24 October an initial artillery bombardment that included six tons of diphosgene smashed into the Italians' heavily fortified line. The Italian troops had little experience of poison gas, and what masks they did have could not protect them. In one sector an entire regiment – the 87th Infantry –

was annihilated in minutes. Elsewhere on the line, the troops realised they were being exterminated and fled in terror. The line, which had stood firm for two and half years, collapsed and was quickly overrun by the German and Austro-Hungarian forces. The Italians were driven back 60 miles in a matter of weeks. They lost 700,000 men in the rout, over 500 killed by the gas, and 270,000 taken prisoner.

To this day, the word Caporetto is still used by Italians to describe a humiliating defeat, but the disaster would have yet more powerful political consequences. Consistently used in rhetoric after the war to discredit the country's liberal state, it played a key role five years later in persuading the Italian people to abandon democracy and to embrace Benito Mussolini's fascist dictatorship.

German soldiers administer first aid in the aftermath of a British gas attack in 1915



Machine gunners wearing gas masks in 1917



EARLY GAS MASKS

German Improvised Mask

When the battlefield and the laboratory first collided, soldiers had to find their own protection from poison gas. The first masks usually consisted on some kind of eye protection, plus a urine-soaked cotton cloth worn over the mouth and nose.



The Hypo Helmet

Developed by British scientists shortly after the first gas attack in April 1915, this was a simple khaki flannel bag soaked in chemicals that protected against chlorine. The soldier placed it over his head, tucking the bottom into his tunic.



Small Box Respirator

The introduction of phosgene gas in December 1915 saw the advent the following year of masks with more-sophisticated filtration systems. This one used layers of charcoal and soda lime to filter noxious fumes and was highly effective.



GAS! GAS! QUICK BOYS!

With its power to transform the landscape of the battlefield, poison gas was a silent killer that terrorised indiscriminately

“ALL THE SOLDIERS WERE DEAD. SOME WERE UNDER THE GROUND, HIDING IN CAVES. IT WAS THE WRONG THING TO DO BECAUSE THE GAS WAS SPREADING LOW. WE CAME ACROSS HUNDREDS OF GASSED SOLDIERS LYING IN THEIR TRENCHES AS IF THEY WERE ASLEEP”

Ivan Kovacic, Austro-Hungarian infantryman on gassed Italian troops at Caporetto, 1917



At the start of World War I, to circumvent The Hague Convention's ban on using gas in artillery bombardments, chemicals were instead unleashed from cylinders. With the wind blowing in the right direction, a deadly fog would float ominously across No Man's Land to the enemy trenches.

The gas moved fast. From the moment a soldier heard the clanging of a bayonet on a shell case and the panicked shriek of "Gas! Gas! Gas!" from the lookout, he had around 20 seconds to protect himself. 20 seconds to unfasten the case around his neck or at his

waist that held his respirator. 20 seconds to remove his helmet, to unpack the mask, to open and fit it over his head, making sure all the sides were tucked tight to prevent deadly fumes from leaking in.

As he was doing this the sinister, silent fog would be inching ever closer. Creeping its way across the battlefield, heavier than the air it was dispersed into, it would seep into the hollows and cling to the lowest parts of the earth. Shell holes, ditches and trenches, which provided some sanctuary from shrapnel and machine-gun fire, were transformed into open

graves. In fact, the gases proved so potent and pervasive that they would sometimes linger for days. Lurking like some yellow-green ghoul at the bottom of a shell hole, say, to ensnare an unsuspecting man diving for cover from sniper fire.

By the end of 1915, The Hague Convention was dead, and both sides were pummeling each other with explosive shells crammed with chemicals. Now, when the cry of "Gas! Gas! Gas!" rang out, the time a man had to get into his mask was down from 20 seconds to just six.



Nurses from the Red Cross
issue first aid to a pair of
gassed soldiers

THE AFTERMATH

How poison gas lingered with its victims and beyond

When hostilities ended, poison-gas pioneer Fritz Haber wasn't tried as a war criminal as expected, but instead awarded the Nobel Prize for his earlier work on nitrates. Spurred on, and in innovating-scientist mode, he continued his work with poison gas.

Haber's brainchild may not have killed in the numbers he'd hoped for, but it'd maimed indiscriminately. Its terrible legacy was the thousands of survivors who struggled with shattered lungs or blindness as a result.

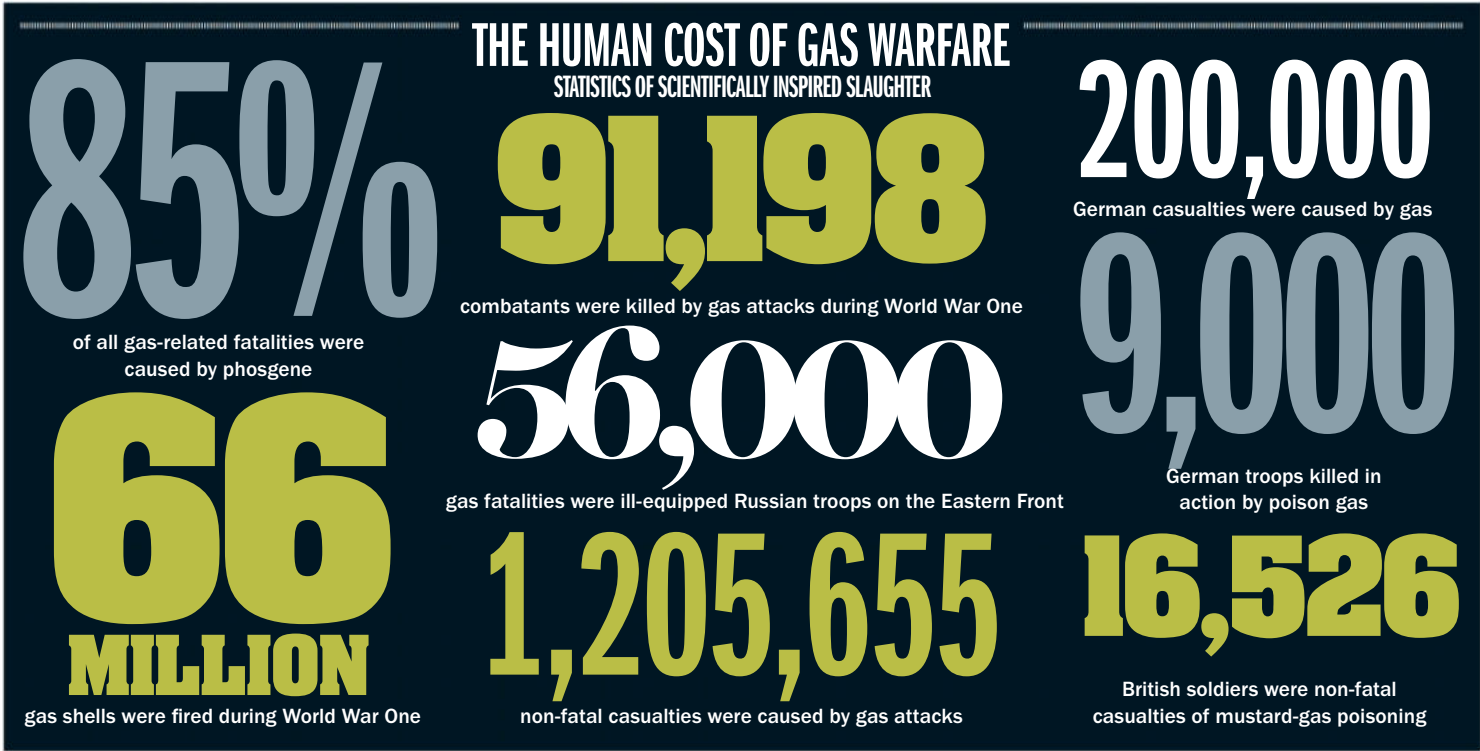
In 1925 the newly formed League of Nations acknowledged this with an outright ban on gas as a weapon. But even international condemnation wasn't enough to put Haber off.

With his work disguised as pest-control research, he patented a new killer based on hydrogen cyanide just a year after the ban. Its name was Zyklon B and it was so good, the Nazis would go on to annihilate millions with it at Treblinka, Sobibór and Auschwitz.

Not that Haber ever got to see his "wonder weapon" in action. He may have been a fervent patriot, but he was also Jewish, and when the Nazis seized power in 1933 they chased him from his beloved homeland. He died alone in exile just one year later.

**"PROPPED UP AGAINST A WALL
WERE A DOZEN MEN – ALL
GASSED – THEIR COLOURS
WERE BLACK, GREEN AND
BLUE, TONGUES HANGING OUT
AND EYES STARING"**

Sgt Elmer Cotton, 5th Battalion,
Royal Northumberland Fusiliers,
Ypres 1915



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WESTLAND WASP

The first of a new breed of anti-submarine helicopters, the Westland Wasp was small but deadly

Submarines have the ability to strike fear into entire navies, so several countermeasures have been designed to combat their destructive capabilities. These include anti-submarine helicopters such as the Westland Wasp, which was heavily involved in the Falklands War. With good range and speed, the Wasp was a useful all-rounder in the Royal Navy's fleet and could land on both large battleships, such as the HMS Bristol and HMS Endurance, and small Leander- and Rothesay-class frigates. When an enemy sub was sighted, Wasps would quickly be dispatched to eliminate the threat.

During the 1982 war, the Argentinian submarine Santa Fe was a hazard to the British fleet as it attempted to land on the South Georgia Islands. On 25 April, along with the larger Westland Lynx and Westland Wessex, a Wasp struck the Santa Fe with AS-12 air-to-surface missiles. The submarine wasn't sunk, but was too damaged to manoeuvre or submerge to safety. It was boarded and disabled, taking it out of the war. The Wasp was the first of a new breed of helicopter that used gas-turbine generators and set the bar for the future of anti-submarine helicopters. 96 of the machines were built for the Royal Navy before being replaced by the Westland Lynx in 1988. Wasps continued to serve other navies across the globe such as Brazil, Indonesia, Malaysia, Netherlands, New Zealand and South Africa until 2000 when the model was finally discontinued.



A pair of Westland Wasp helicopters from 829 Naval Air Squadron in flight July 1984.



WESTLAND WASP HAS.1

COMMISSIONED 1965

ORIGIN Fairey Factory, Hayes, Middlesex, UK

LENGTH 12.3m (40ft)

ENGINE Rolls-Royce Nimbus 103 Turboshaft

TOP SPEED 222km/h (138mph)

CREW 2-5

WEAPONS Two MK 44/MK 46 torpedoes,
AS.11/AS.12 missiles, machine gun

The first Westland Wasp prototype was showcased at the Farnborough Air Show on 8 September 1962 and they are still used in displays to this day

The cabin was made from a tough aluminium alloy structure to protect the crew from the elements when in flight. The cockpit included an device on the roof to help missiles hit their designated target

**“WHEN AN ENEMY SUB WAS SIGHTED,
WASPS WOULD BE QUICKLY DISPATCHED
TO ELIMINATE THE THREAT”**





Dials illustrated all of the helicopter's levels including fuel and speed. At 222km/h (138mph), the agile Wasp could strafe surfaced submarines with its machine gun



A Wasp was controlled by a cyclic stick, which is common in many similar sized craft and gives the pilot complete control

The cabin was big enough for five people: a pilot, an aircrewman who would help with navigation, the weapon systems and the general execution of the mission in hand. In larger and more-modern helicopters, he would often be assisted by an observer to help navigate. Up to three extra people would occasionally sit in the rear, but a stretcher often took the space for rescue missions. If the pilot had to make an emergency landing, the Wasp was fully kitted out with inflatable flotation gear, in case the ocean was the only option available.

INTERIOR AND COCKPIT

The cockpit was the control centre of the Wasp and powered everything from flight to communications to armaments. The pilot would sit on the right and would be supported by an aircrewman who would help with navigation, the weapon systems and the general execution of the mission in hand. In larger and more-modern helicopters, he would often be assisted by an observer to help navigate. Up to three extra people would occasionally sit in the rear, but a stretcher often took the space for rescue missions. If the pilot had to make an emergency landing, the Wasp was fully kitted out with inflatable flotation gear, in case the ocean was the only option available.

Unlike the similar Westland Scout, the Wasp had quadricycle landing gear for landing on smaller vessels

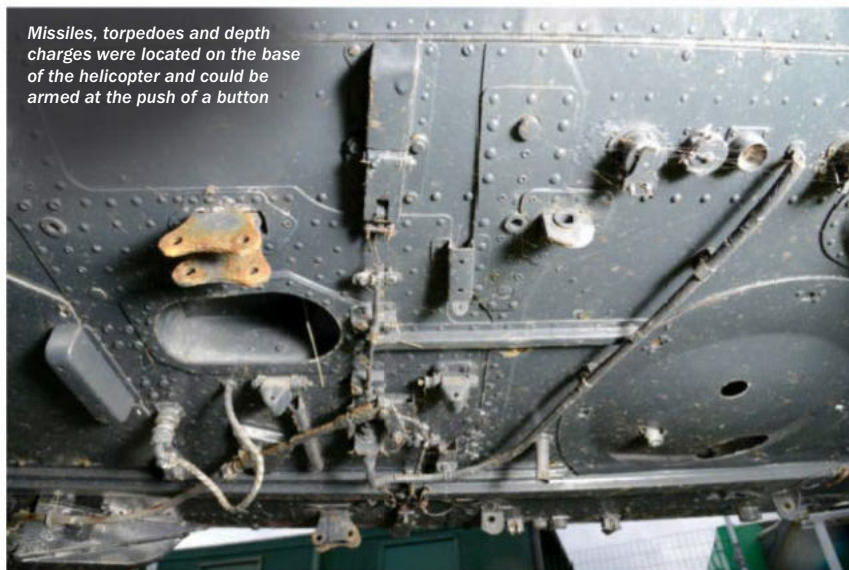


Below: As well as weapons, the craft also contained flares and cables that could be used to winch up stranded personnel



"IF THE PILOT HAD TO MAKE AN EMERGENCY LANDING THE WASP WAS FULLY KITTED OUT WITH INFLATABLE FLOATATION GEAR"

Missiles, torpedoes and depth charges were located on the base of the helicopter and could be armed at the push of a button



HELICOPTERS OF THE FALKLANDS

AS WELL AS THE WASP, VARIOUS OTHER MODELS OF HELICOPTER WERE SENT ON THE 12,789-KILOMETRE (7,947-MILE) JOURNEY TO THE FALKLANDS. HERE'S A RUNDOWN OF THE MAJOR TYPES:

WESTLAND LYNX



Role: Multi-purpose, patrol and anti-submarine warfare



WESTLAND WESSEX

Role: Logistics, search and rescue

WESTLAND SEA KING

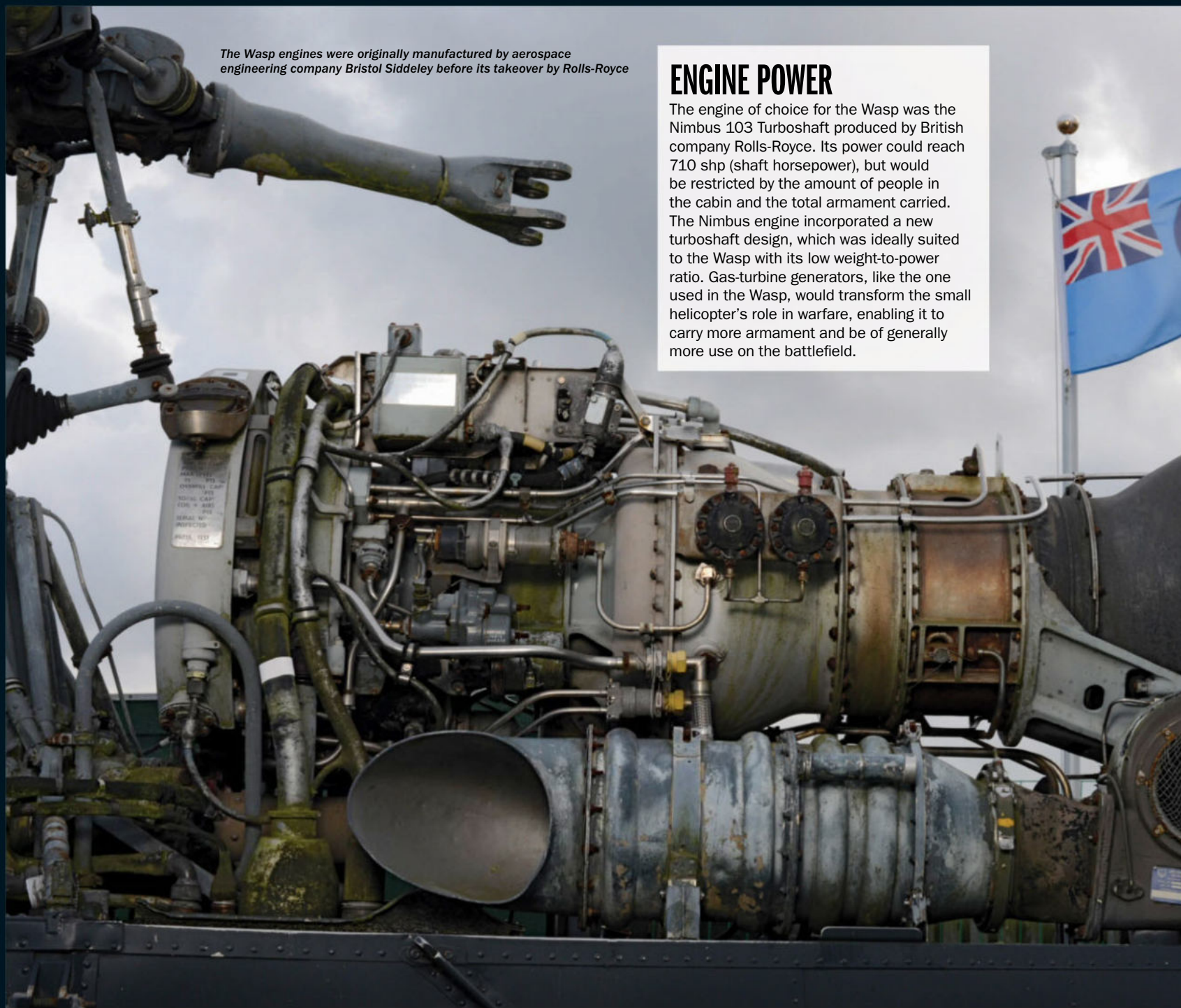


Role: Anti-submarine, troop transport

The Wasp engines were originally manufactured by aerospace engineering company Bristol Siddeley before its takeover by Rolls-Royce

ENGINE POWER

The engine of choice for the Wasp was the Nimbus 103 Turboshaft produced by British company Rolls-Royce. Its power could reach 710 shp (shaft horsepower), but would be restricted by the amount of people in the cabin and the total armament carried. The Nimbus engine incorporated a new turboshaft design, which was ideally suited to the Wasp with its low weight-to-power ratio. Gas-turbine generators, like the one used in the Wasp, would transform the small helicopter's role in warfare, enabling it to carry more armament and be of generally more use on the battlefield.



ARA SANTA FE

One of two submarines used by the Argentines during the war (the other being the ARA San Luis), the ARA Santa Fe was originally an American vessel before it was purchased by the Argentinean Navy in 1971. It was a constant thorn in the side of the Royal Navy ferrying troops across the Falklands. Although she never engaged a British ship, her sheer presence ensured the British forces maintained their distance. The threat was ended by an AS-12 missile delivered from a Wasp on 25 April 1982, after the submarine was spotted off the coast of King Edward Point, South Georgia. Although not destroyed, the Santa Fe was disabled and scuttled by the British shortly after.



Engine failure wasn't common in Westland Wasps but that wasn't the case for the Wasp of the HMS Cleopatra, which activated its flotation device after this unfortunate incident



THE BOURNEMOUTH AVIATION MUSEUM

On August 1999, the Bournemouth Aviation Museum was established on the same site as Bournemouth Airport. Originally part of the now defunct Jet Heritage Museum, the centre strives to be a hands-on experience. It houses 15 aircraft ranging from military jets to a Boeing 737. Visitors are encouraged to jump in the cockpit and have a go in a truly interactive experience.

www.aviation-museum.co.uk



The engine was powerful enough to withstand the weight of torpedoes, missiles and depth charges, and enabled the Wasp a maximum take-off weight of 2,500kg (5,512lbs)



"GAS-TURBINE GENERATORS WOULD TRANSFORM THE SMALL HELICOPTER'S ROLE IN WARFARE"



SYSTEMS AND ELECTRONICS

The Wasp had a very complex network of features for a craft of its size. Autopilot and autostabilisation capabilities, as well as a hydraulic system, made life much easier for the pilot and made it ideal for use as a training helicopter. A 28-Volt electrical supply powered an intercom and radio that enabled the Wasp to be in constant contact with base for attack, reconnaissance and rescue missions.

WEAPONS USED TO DISABLE THE ARGENTINIAN SUBMARINE

MK46 TORPEDOES

Specifically designed for tackling submarines, a MK46 was launched at the Santa Fe by a Westland Lynx helicopter, but didn't register a hit. If it had done, the submarine would have recorded more-significant damage and may have sunk.



AIR-TO-SURFACE MISSILES

The Wasp was originally armed with SS.11 missiles, but these were later upgraded to AS-12 anti-ship missiles. All three Wasps that attacked the Santa Fe made critical hits.



MACHINE GUNS

Before the attack began, the Santa Fe was forced to surface after an initial assault from HMS Antrim so depth charges were not useable. Instead, the submarine was sprayed with machine gun fire.



BOOK REVIEWS

History of War's pick of the newest military history titles waiting for you on the shelves

AN EMPIRE ON THE EDGE: HOW BRITAIN CAME TO FIGHT AMERICA

Author Nick Bunker **£19** **Publisher** The Bodley Head

It's hard for us in the modern era to see America as anything less than a superpower that dominates global politics. However, as Nick Bunker's book *An Empire On The Edge* demonstrates, it wasn't always like this. Rewind to the 18th Century – America is just a handful of isolated colonies in a remote land, but a nation is about to be born and Bunker's version of how that happened is enthralling, even if it is a little lopsided.

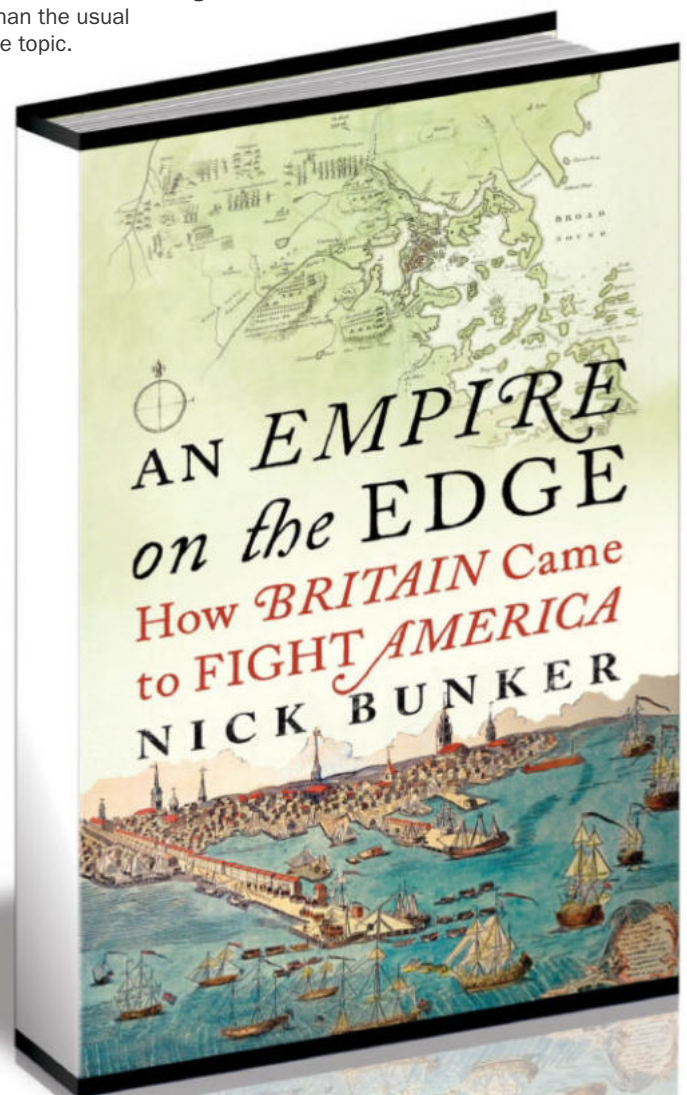
Bunker may be a Brit, but his version of history is heavily weighted in America's favour. While there can be little doubt that the British did, to use a technical term, cock things up, his

almost relentless portrayal of them as arrogant, shortsighted meanies is imbalanced. This, after all, was the generation that embarked on what would become a successful quest to dominate global trade. They were undoubtedly prisoners of their age, but they couldn't have been, as this book suggests, simultaneously unwitting and calculating.

That is not to say that this is a bad book. On the contrary, it sheds a bright light on the subject and its angle of enquiry – which largely interprets events in terms of financial winners and losers – reveals far more than the usual simplified narrative found on the topic.

Its accurate identification of the Gaspée incident in 1772, for example, as the true flashpoint of the American Revolution, is truly insightful. The torching of the beached British customs ship HMS Gaspée by a group of disgruntled colonists was a pretty unsavoury act of defiance. The fact that it has been replaced in the American imagination by the more-palatable events of the Boston Tea Party, says much about the continuing gulf between how America sees itself and the often less glamorous facts.

“A nation is born and Bunker's version of how that happened is enthralling”



1941 A GLOBAL CONFLICT

Author John Christopher and Campbell McCutcheon **£16**

Publisher Amberley Publishing

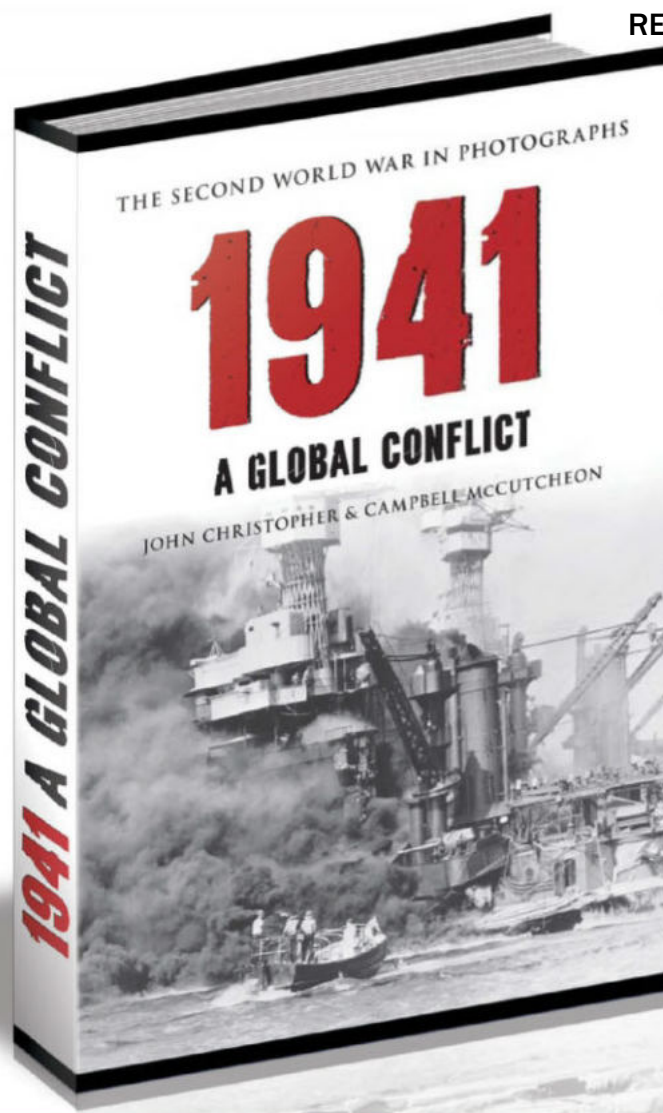
Subtitled *The Second World War in Photographs*, this compelling book examines the staggering events of 1941. It shows how, at the start of that year, the war was essentially a standoff between Britain (and the Commonwealth) and Germany, but by its end had become a truly global conflict.

Although it would take until December for the US to get dragged in, the book begins by showing us that America was far from unprepared or indifferent. Despite its neutrality, the US had clearly already taken sides and was fast becoming, in Roosevelt's words "the arsenal of democracy", going into industrial overdrive to supply Britain with the means to defend herself.

At home, as the book goes on to show us, Britain's cities were being shattered by the Blitz, while in North Africa its troops were taking on the Axis powers in open battle, scoring their first victory at Tobruk. 1941 was also the year

Crete fell, the Bismarck was sunk, and Rudolf Hess flew to the UK on a bizarre peace mission. More importantly, though, it was also the year that Germany smashed its way into the Soviet Union with the biggest invasion force the world had ever seen. It was also when Japan launched its infamous attack on Pearl Harbor, turning an essentially European conflict into a global war.

Inevitably, some of the photography is familiar, but most of it is not. Iconic images have been eschewed in favour of less sensational ones and the result is profoundly affecting. The events themselves are so significant that the low-key imagery used to explain them helps draw the observer quietly in. The photos often reveal deeply personal moments, with the people in them seemingly transfixed by the enormity of the times they find themselves in. This is truly mesmerising stuff.



CUT & THRUST: EUROPEAN SWORDS AND SWORDSMANSHIP

Author Martin J Dougherty **£18** **Publisher** Amberley Publishing

OK, so on the surface this would appear to be a pretty niche title – a specialist subject for a *Mastermind* contestant, perhaps. But to dismiss *Cut & Thrust* like this would be to eschew a surprisingly absorbing read.

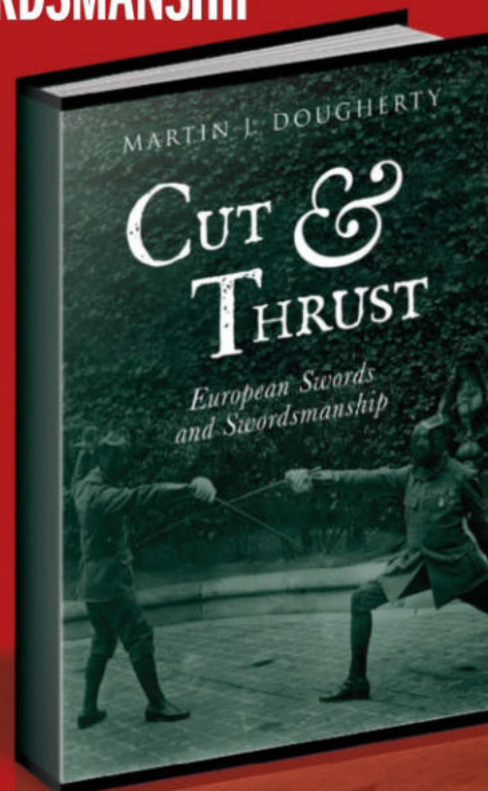
If you've ever read Neil Macgregor's *History Of The World In 100 Objects*, or Tom Standage's *A History Of The World In Six Glasses*, you'll have an idea about what makes *Cut & Thrust* such a fascinating book. Much like those authors, Dougherty has chosen to examine the past from an utterly unique perspective – swords.

When you think about it, that's not as bonkers as it sounds. For centuries, swords weren't just weapons, but the currency in which power was brokered. As such, they became the means by which knighthoods were awarded, and kings were toppled. In time, they became status symbols in their own right and were celebrated in art, literature and music.

Dougherty's account starts with the gladius, the short sword used by Rome's legions to build its empire. From there he takes us through the Dark Ages of Vikings, Anglo-Saxon warriors and Norman conquerors. Next is the chivalric weaponry of the Middle Ages, right through to the elegant rapiers of the Renaissance and the cavalry sabers of the Victorian age.

Along the way we get a sense of the historical and cultural shifts that prompted the development of bladed weapons. We also get a real insight into the skills required to use them. As sword technology evolved so did sword technique, eventually developing into the quite literally noble (martial) art of fencing.

As the author points out in his introduction: "Of all the weapons ever invented, none has the mystique of the sword." He's right, as this book so convincingly proves.



“Swords became status symbols in their own right, celebrated in art”

THE SECRETS OF Q CENTRAL: HOW LEIGHTON BUZZARD SHORTENED THE SECOND WORLD WAR

THE STORY OF ONE OF BRITAIN'S MOST IMPORTANT INTELLIGENCE OPERATIONS – ONE THAT'S REMAINED A WELL-KEPT SECRET FOR 70 YEARS

Edited by Paul Brown and Edwin Herbert **£15** **Publisher** Spellmount

Intelligence has long been one of the most fascinating realities of warfare. While populist fictional accounts of conflict more often than not present us with notions of tenacious, incorruptible heroes of the frontline who refuse to say die, we're well aware that this borders on the fantastical – pure Hollywood magic. Those who stand in the shadows, however, cracking codes and whispering sensitive information, are the ones who really grab our attention. They are, after all, the ones we know are likely much closer to reality – but *how* close is the question. If they're doing their jobs properly, everything should remain a mystery.

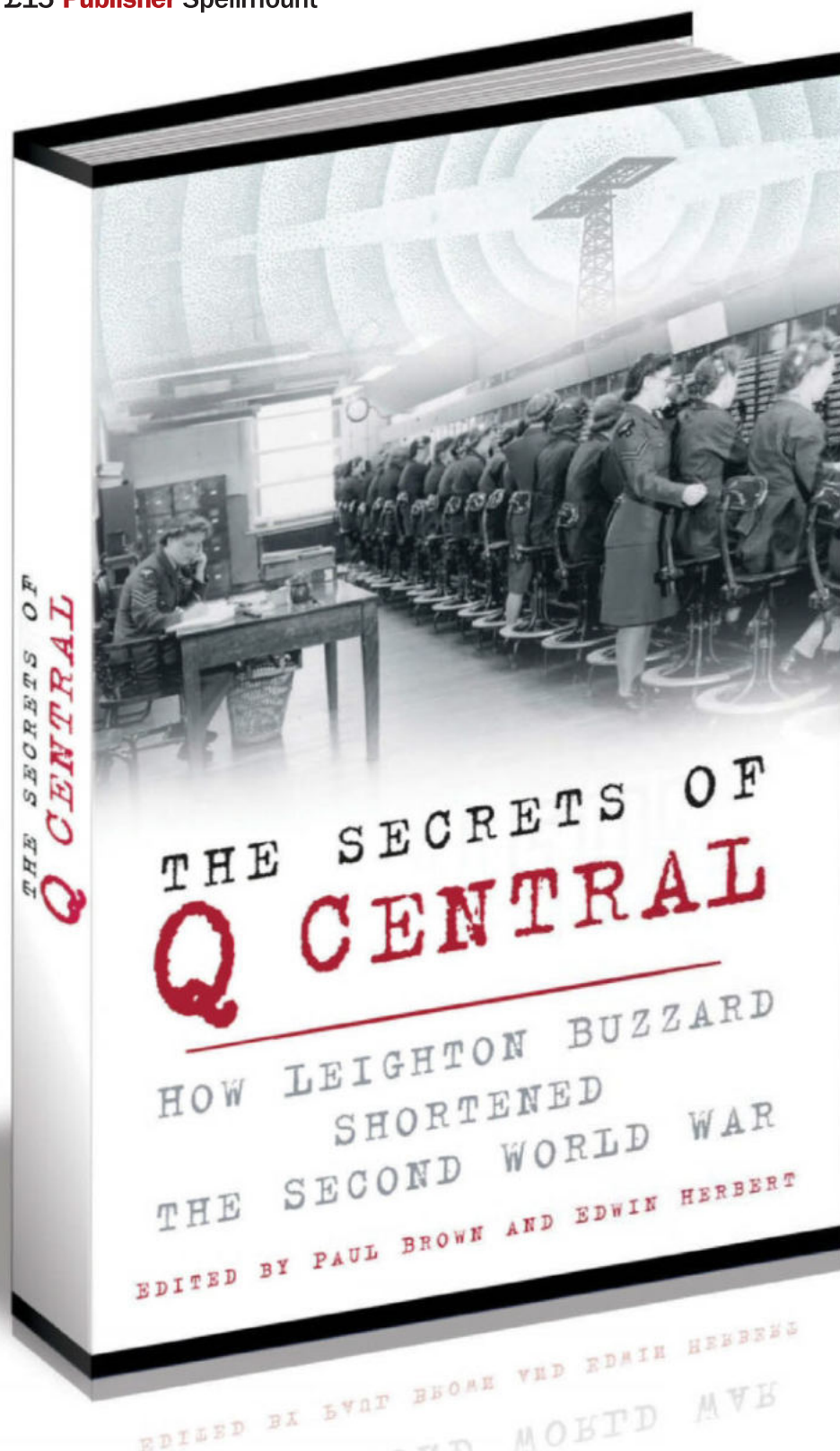
That's probably why it's taken until now for a full account of Q Central to be released. No doubt the renewed interest in wartime intelligence is a factor too, following the cinema release of *The Imitation Game*, in which Benedict Cumberbatch plays the Enigma-cracking genius Alan Turing, who was based at "Station X" in Bletchley Park, Buckinghamshire.

As the title of Paul Brown and Edwin Herbert's book suggests, Q Central was based at Leighton Buzzard. The location was ideal for an MI5 and MI6 nerve centre. Leighton Buzzard was of little interest to the Axis and a good distance from the coast. As the book reveals, though, the base – essentially the communication epicentre of Britain's war effort – was still protected by an innovative camouflage undetectable from the air and defended by anti-aircraft guns. There was even a dummy station set up nearby, just in case. It was, as the book claims, a critical setup for Britain's armed forces – reason enough to pick up this book.

The writers cannot understate the importance of the Leighton Buzzard's Q Central, which apparently worked in close communication with the more famous Bletchley Park. Though the local people were scarcely even aware of its existence, it masterminded black propaganda ops, worked with people behind enemy lines, and became central to Britain's radar operations – it was also integral to the successful execution of the Battle of Britain and the D-Day landings.

The book comes together through findings from the Leighton Buzzard and District Archaeological and Historical Society, which surfaced during research into whether what remains of Q Central should be preserved. At times, the revelations about how big a role Q Central played in Britain's war seem to surprise its writers. It's interesting to think that, had that research not been done, this story may have remained largely untold – which feels like something of a rarity for World War II, about which seemingly every available detail has been studied and discussed many times in the last 70 years.

What began as a project of local interest has turned into a story of huge national significance – and this book does it justice, pulling apart all facets of Q Central's operation. It's described as "the largest telephone exchange in the world", a name that does its importance a disservice. No doubt that's just what it seems on the surface – and as this book proves, what's really going on behind the curtain is far more fascinating.



“This project of local interest turned into a story of national significance”

FIGHTER ACE: THE EXTRAORDINARY LIFE OF DOUGLAS BADER, BATTLE OF BRITAIN HERO

Author Dilip Sarkar **£10** **Publisher** Amberley Publishing

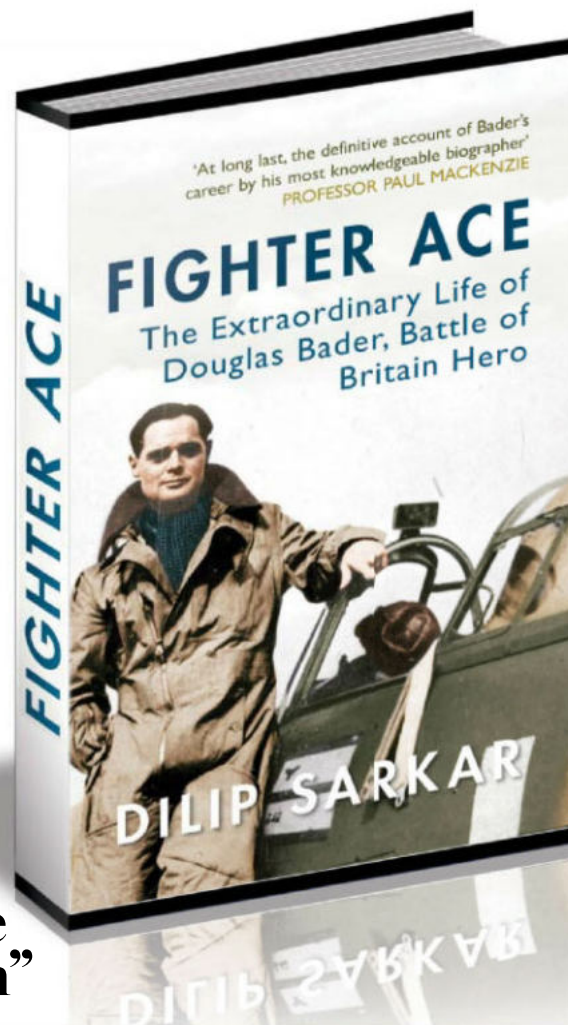
Dilip Sarkar's latest book is a fundamentally interesting concept: though essentially just a straightforward biography, and of an undeniably captivating real-life hero, the book stands against several others already written on the story, one of which – Phillip Brickhill's *Reach For The Sky* – was made into live action feature film, cementing Douglas Bader as a legendary figure of sorts. As such, Bader's story has been romanticised, occasionally blurring the lines between fact and fiction, and leaving room for a more factual account to be written of the pilot's life. That seems ultimately to be Sarkar's motivation in writing this book – an effort to separate reality from myth.

Despite setting out to chronicle Bader's life objectively, it's clear the writer has affection for the real man. That's no great surprise; for a whole generation of schoolboys, Bader – who became a

double amputee after an accident before the war, went on to lead squadrons of Spitfires and Hurricanes in 1940's Battle of Britain – was a truly inspirational figure. His story is the kind that the term "stiff upper-lipped" was invented for, defying the odds and not letting adversity win over a steely spirit to win the day.

Fortunately, Sarkar doesn't fawn over the real man. It's an honest account, and feels somehow more candid than those previously written. It does sometimes seem, however, as if the writing's more concerned with outdoing previous Bader biographers, which will be of little interest to new readers on the subject.

Regardless, it's a solid telling of a remarkable story – and serves as a reminder of how stories can be spun and romanticised in the wake of warfare, when ideas of national heroism can prove just as important as they were during conflict.



“Despite setting out to chronicle Bader's life objectively, it's clear the writer has affection for the real man”

DEUS VULT: A CONCISE HISTORY OF THE CRUSADES

Author Jem Duducu **£10** **Publisher** Amberley Publishing

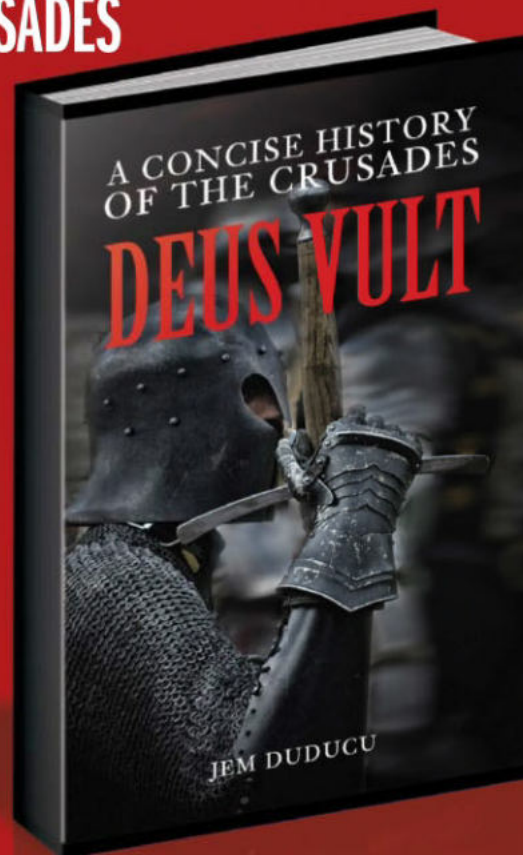
Jem Duducu's brief book aims to dispel some myths about the “crusades” – that it took place primarily in the Middle East, that it was a simple, black and white conflict of Christianity versus Islam, and that fighting that took place during 200 years across the 12th and 13th Centuries are directly responsible for modern day tensions between the two religions. Not so, says Duducu: the crusades were also fought in Europe and North Africa, there was also much infighting between the Christian crusader states and rival Muslim princes, and if the two ideologically opposing sides could come to terms centuries ago, can't we do the same today?

Duducu does acknowledge, however, that modern-day events have created a resurged interest regarding the crusades – namely the 11 September attacks on the World Trade Center. Until then, the crusades were viewed as near-mythical in the West, something often resigned to serving as a backdrop for stories about Robin Hood and gallant knights; in the Middle East, they're more like a brutal, bloody scar that refused to completely heal.

But Duducu's book doesn't take things too seriously. It is essentially a beginner's guide – a light-hearted roundup that swiftly covers an awful lot of ground.

He begins 1,000 years before the instrumental “God will reward you if you fight to achieve His goals” speech of Pope Urban II in 1095 – largely credited with beginning the crusades – all the way back to the birth of Jesus, through the first ever Christian military victory at the Battle of Milvern Bridge, up to the start of the First Crusade. From there the pace slows as Duducu describes not just what happened, but what the ultimate effects were on Europe and the Middle East (not all negative, either). It's a quick and relatively simple read, which has a sly sense of humour and gets to the facts quickly.

“A light-hearted roundup that swiftly covers a lot of ground”



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TYPE VII U-BOAT

World War II's terror of the Atlantic in facts and figures

421,156

▲ Tons of Allied shipping sunk by the end of 1939, with a loss of only 9 U-boats

9,500

▲ Nautical miles: maximum range of the Type VIIF

▼ First Type VII commissioned

24.06.36



254.6FT

The maximum Type VII length

▼ The total number of Type VIIs built

709

46

▲ Total crew
aboard the vessel

ZULU WAR



This dramatic limited edition set is a welcome addition to one of the most complete matte finished Zulu War figure collections available today. "Overrun," depicts a British Ambulance and occupants in the last moments of the Zulu attack on the British Army camped at Isandlwana, January 22, 1879.



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COMBAT

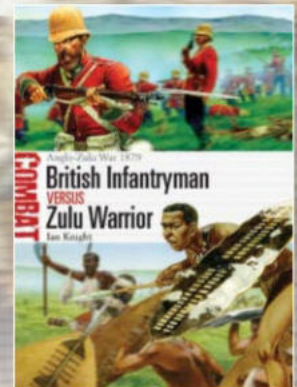
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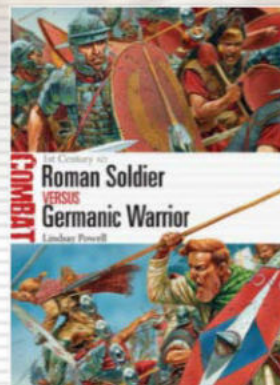
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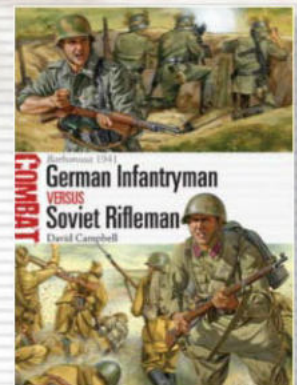
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